

SCANIMATE ZEROING PROCEDURE

1) Dumont 2100 Setup

CH-1

CH-2

DC

Volts - .5

Volts - .2

Source - Ext.

Syne - Vert.

Coupling - AC

zero - line @ qnd. to center | TIMES/DIV. - 2 msec (vert. syne) |

3) Video Processor

INVERT TEST

Level Select - 1


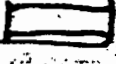
4) BLANKING

Horz. Seq. Cont.

Vert Seq. #1 up (INHIBIT)

Vert. Seq. Control - 900 (1 section)

5) System Function / Function Switch

- 1) SECTION CONTROL - 900 (1 section)
 - 2) INITIAL DEPTH set at ZERO with INITIAL DEPTH Pott
 - 3) INITIAL HORZ. set at ZERO with INITIAL HORZ. Pott
 - 4) INITIAL VERT. set at ZERO with INITIAL VERT. Pott
 - 5) FINAL DEPTH set below ZERO just off scale
 - 6) VERT. Out  (approx. 2.5 volts)
 - 7) HORZ. Out  (approx. 2.75 volts)
 - 8) adjust length and width for 3x4 Raster.
- OR 3x4 RASTER on a CROSS HATCH
- ↳ look at Vert out ↳ look at Horz out

E.) ARTWORK CAMERA

1.) Video Processor

1) Non-INVERT / Normal

2. select CAM. A

3.) place test chart on light box

3.) camera pedestal to mark

4.) ^{ATCCU Board} adjust Horz. X size and X offset (-) bottom pott of C.C.U.
so arrows on ^{Left + Right} sides touch edge of raster on CRT.

5.) adjust VERT. Y size and Y offset (1) bottom pott of C.C.U.
so arrows on top and bottom touch edge of raster on CRT

6.) AT scan control with width pott make raster almost ^{line} ~~line~~
at C.C.U. Y Board, middle pott. adjust ~~skew~~ skew
so horz. lines are straight across (using center
horz. line). BRING ~~width~~ Raster to normal width

7.) AT scan control with length pott make raster almost
a line ~~width~~. AT C.C.U. X Board, middle pott adjust X
skew so vert. lines are straight up and down (using
center vert. line) BRING Raster to normal length

8. Switch Video Processor back to INVERT / TEST

8. Commutators

a. 1) section control dial 100 200 300 400 (5 sections)

b. 2.) with Commutator Switch select:

- 1.) FINAL Horz. set at zero with five FINAL Horz. pots
- 2.) FINAL VERT. set at zero with five FINAL VERT. pots
- 3.) FINAL Depth set at zero with five FINAL Depth pots
- 4.) INTIAL Horz. set at zero with five INTIAL Horz. pots
- 5.) INTIAL VERT. set at zero with five INTIAL Vert. pots
- 6.) INTIAL Depth set at zero with five INTIAL Depth pots
- 7.) Width set at zero with five Width pots
- 8.) Length set at zero with five Length pots
- 9.) Horz. Axis set at zero with five Horz. Axis pots
- 10.) VERT. Axis set at zero with five VERT. Axis pots
- 11.) Intensity set at zero with five Intensity pots
- 12.) Sequence

c. 2.) with Function Switch select Horz. Out

d. 2.) Horz. Oscillator turn on / ~ / Run / Fast / Sequence

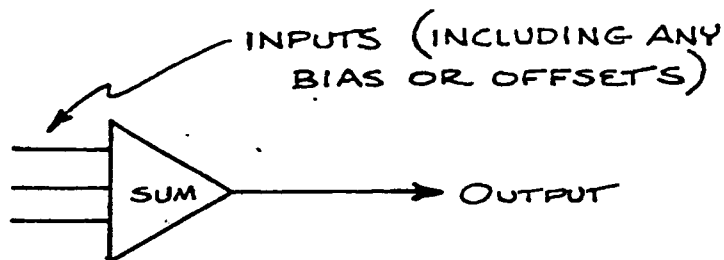
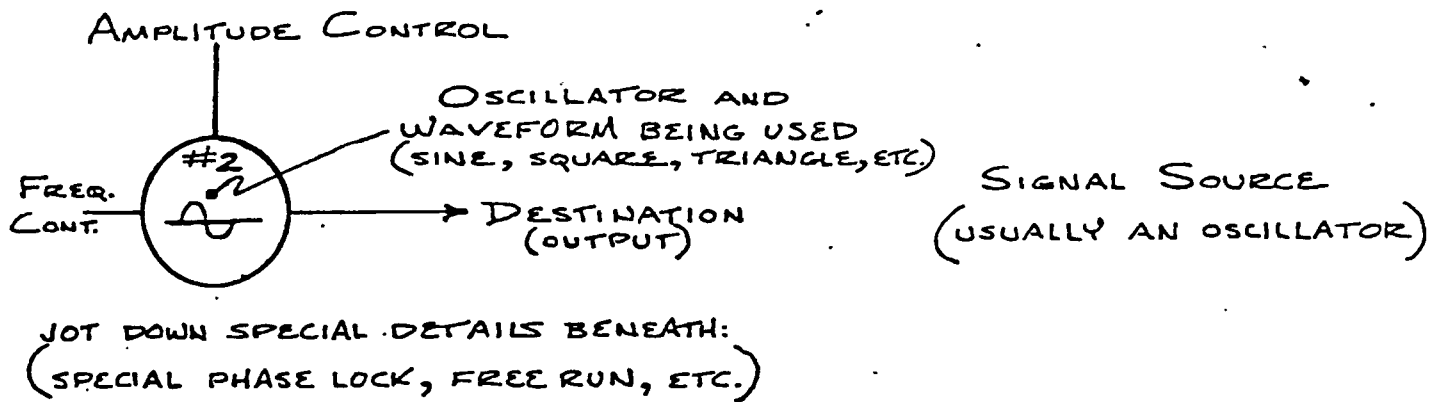
Amplitude pot to maximum / Frequency pot mid range

e. 2.) with Sequence pots null out oscillation in Horz. Out
on scope, of all five sections

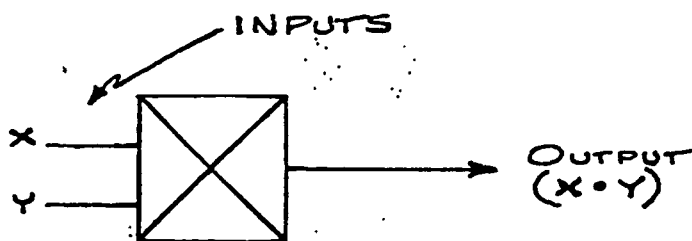
f. 2.) section control dial 900 (1 section)

g. 2.) shut off Horz. Oscillator

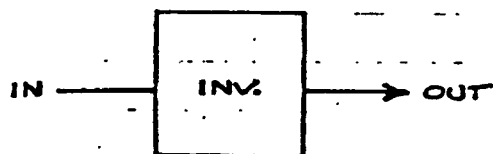
PATCH NOTATION



AMPLIFIER
(SUMMING, INVERTING, ETC.)



MULTIPLIER
(MULTIPLIES VOLTAGE APPLIED AT ONE INPUT BY VOLTAGE APPLIED TO OTHER INPUT)



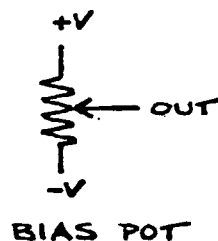
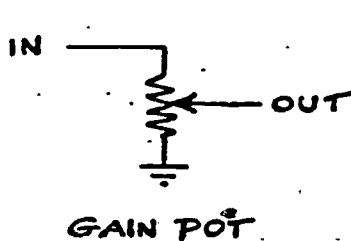
PROCESSING CIRCUITS INCLUDING (BUT NOT LIMITED TO):

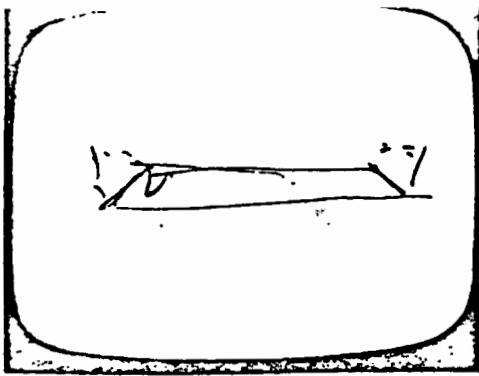
RECTIFIERS

FILTERS

COMPARITORS

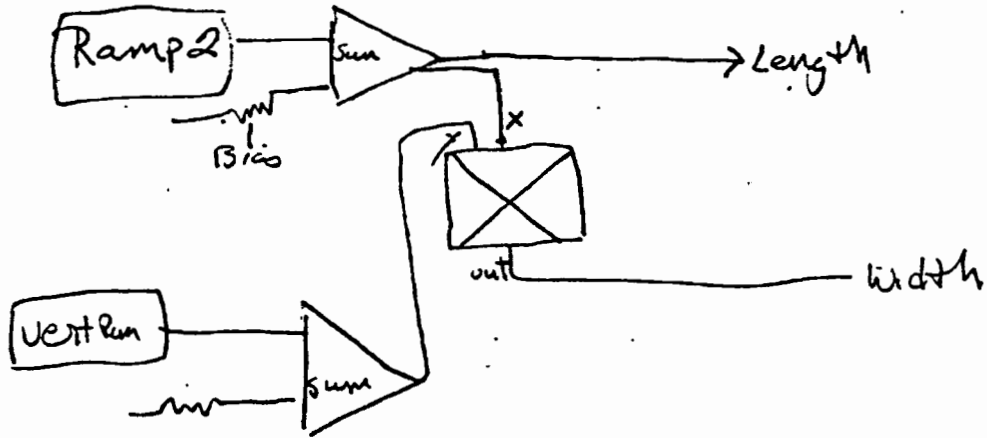
DIGITAL INVERTERS



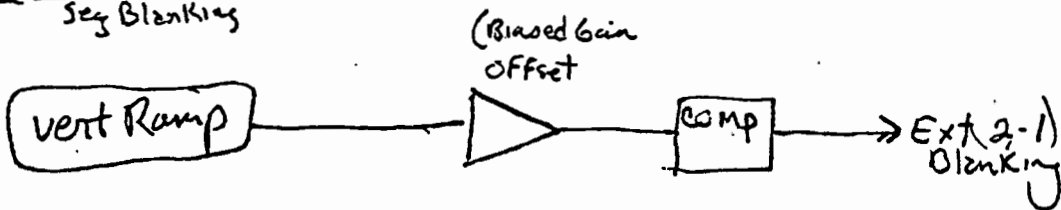


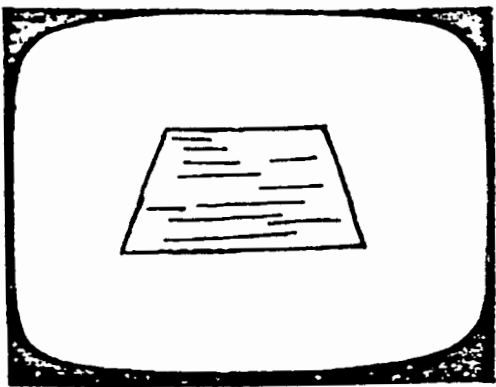
Words

Rise from a line @ perspective



Seg Blanking





"PERSPECTIVE" PINCH (WIDTH
MODIFICATION AT A VERTICAL
RATE)

NOTE:
THIS SHAPING WILL TRACK A SECTION
THROUGH DEPTH

DIRECTION OF SCAN: \longleftrightarrow

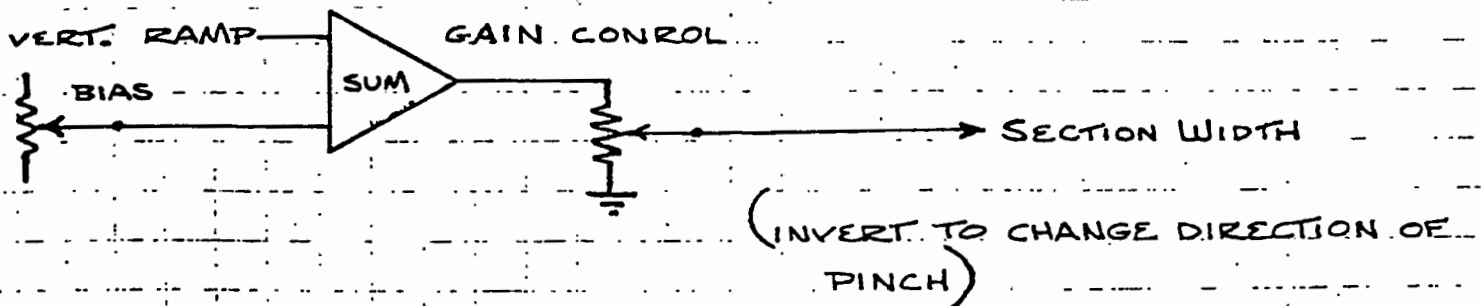
ANY LOW FREQUENCY OSC.

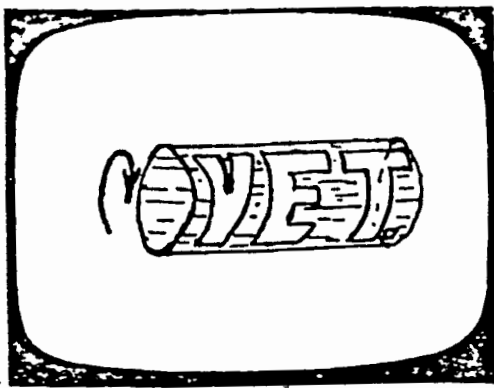


SECTION WIDTH

- TRIANGLE WAVEFORM AT
A LOW FREQUENCY,
- PHASE LOCKED TO VERTICAL
(SELECT "TOP" OR "BOTTOM" LOCK
FOR APPROPRIATE DIRECTION
OF PINCH")
- AMPLITUDE SETTING VARIES AMOUNT OF PINCH

ALSO





VERTICAL ROLL ("COKE ROLL")

FOLD LENGTH TO A LINE

DIRECTION OF SCAN: \longleftrightarrow

SECTION LENGTH AT "O"



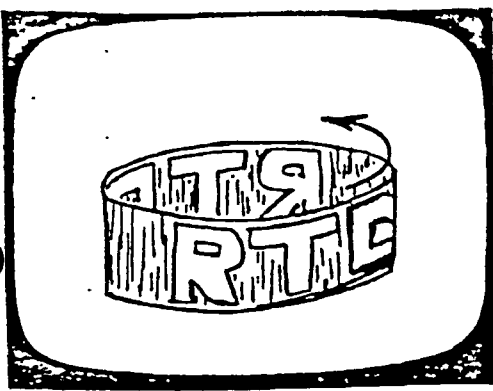
→ SECTION VERTICAL (EITHER FINAL VER
OR, IF YOU WANT
TO RESOLVE OUT
OF IT, INITIAL VER)



→ SECTION HORIZONTAL (SAME AS VERT.
ABOVE)

- AMPLITUDE OF BOTH OSCILLATORS AFFECTS SIZE AND ANGULAR
VIEW OF ROLL

- FREQUENCY CONTROLS SPEED OF ROLLING (WHEN IN FREE RUN)



HORIZONTAL ROLL (ALSO A
"COKE ROLL")

FOLD LENGTH TO A LINE

DIRECTION OF SCAN: \updownarrow

SECTION LENGTH AT "O". RASTER ORIENTED AT 90° (USE
CPU 90° SWITCH OR ROTATION IF MORE THAN ONE SECTION
IS BEING ANIMATED)

PATCH SAME AS VERTICAL ROLL

Word 90°
Rotate....

fold length to a line

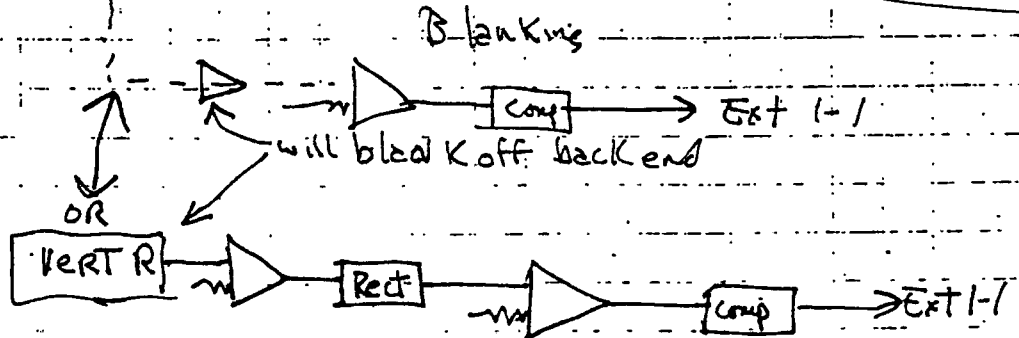
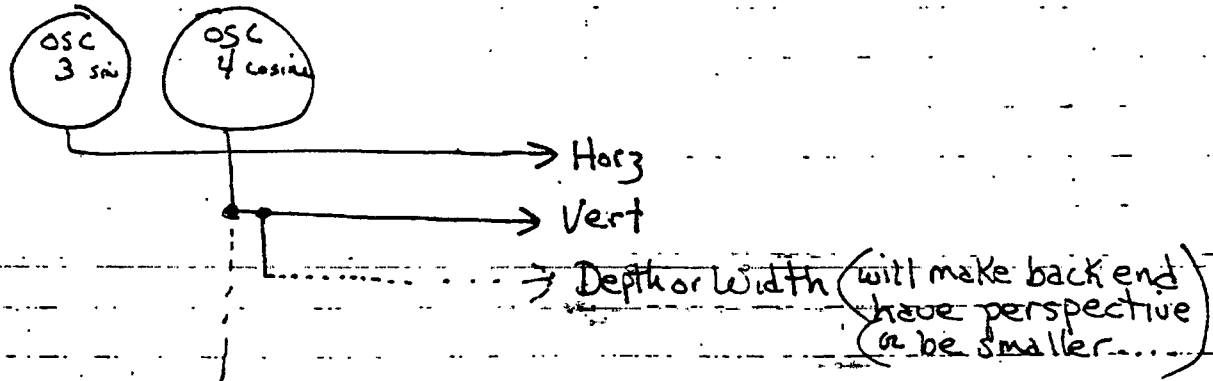
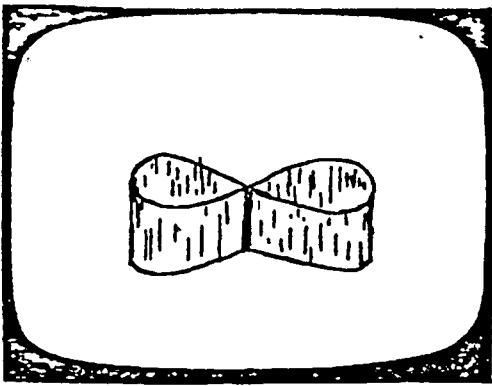


FIGURE 8 ROLLS (CAN BE
DONE VERTICALLY OR HORIZON-
TALLY)



DIRECTION OF SCAN: \updownarrow

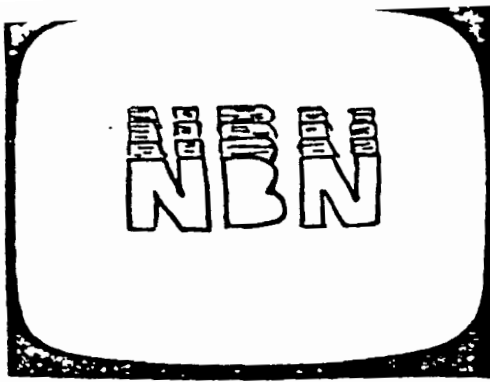
SECTION LENGTH AT "O"



SECTION VERTICAL



SECTION HORIZONTAL



OSCILLATOR STRETCH (ALSO
KNOWN AS: "REASONER STRETCH",
"MULTIPLE IMAGE STRETCH", "HOR.
LINE PHASE LOCK", "STAIRSTEPPING"
AT HIGHER FREQUENCIES THE
EFFECT HAS AN INTERLACED SCISSOR
LIKE QUALITY: ~~XXXX~~

DIRECTION OF SCAN: \longleftrightarrow

HIGH FREQUENCY OSC. #2



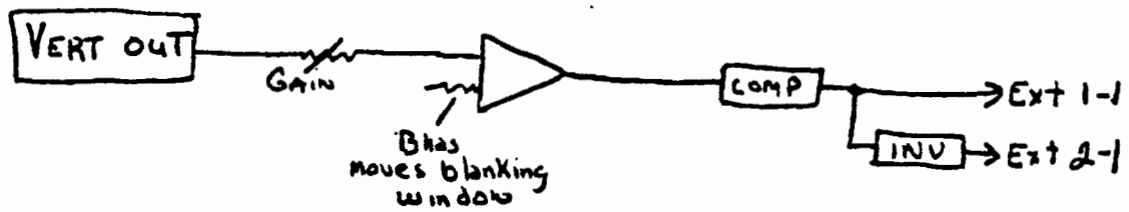
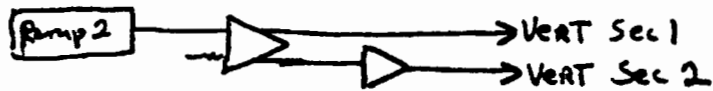
FINAL VERTICAL (ALSO CAN BE
APPLIED TO HORIZONTAL,
DEPTH, LENGTH; VARIOUS EFFECTS
ARE POSSIBLE, EXPERIMENT!

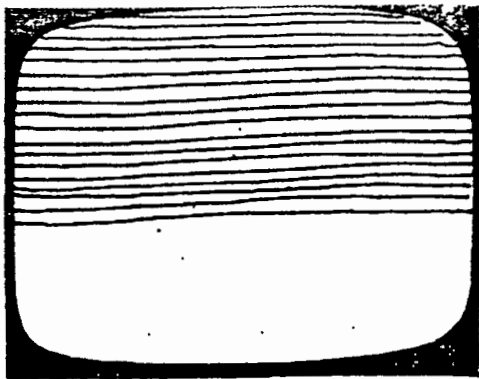
PHASE LOCKED TO A HOR. LINE
(SEE INSTRUCTIONS ON THE "PROGRAMMED
PHASE LOCK & VERT. RESET DRIVER"
WHICH AFFECTS OSCILLATORS #1 AND
#2 IN THE ANIMATION CONTROLLER)



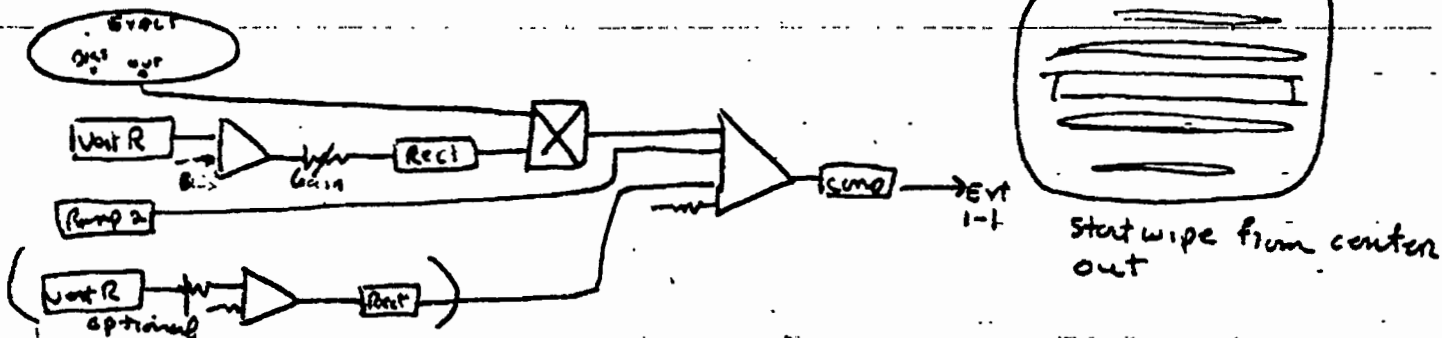
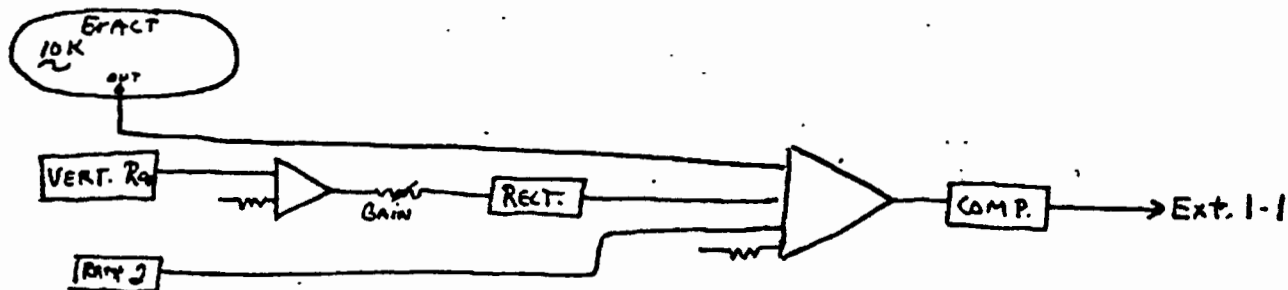
BLANKING Window
words Blank out from same line

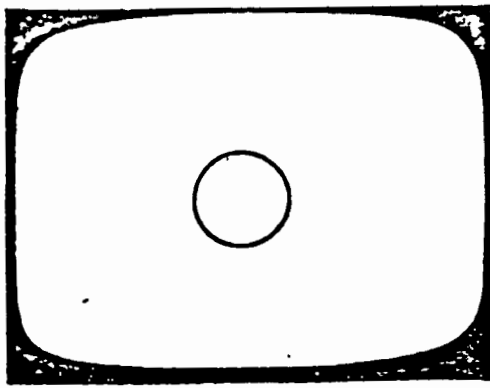
2 sections



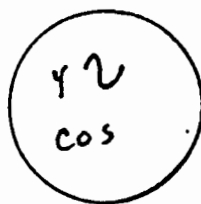


LINES WIPE ON
(BLANKING)
or For Switch Wipes (Scenimate used as
ext. Ref. source)

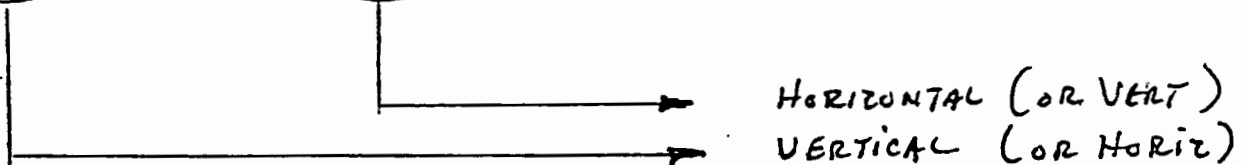




BASIC SIN/COS PATTERNS



Adjust-Ampl. - low #3 + #4
 low freq for #3
 Adjust-Final Depth



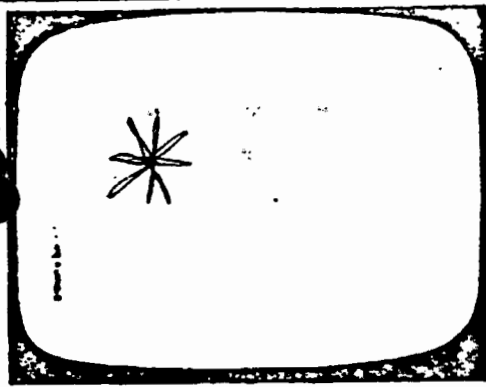
WITH OSC. SET IN 2 PATTERNS ARE ROUND OR ELLIPTICAL
 WITH OSC SET IN V PATTERNS ARE SQUARE (DIAMOND)

ADDITIONAL PATTERNS ARE DEVELOPED W/ OSC 1, 2, & 3
 MULTIPLIED THROUGH #3 & 4.*

MOTION IS PROVIDED W/ RAMPS



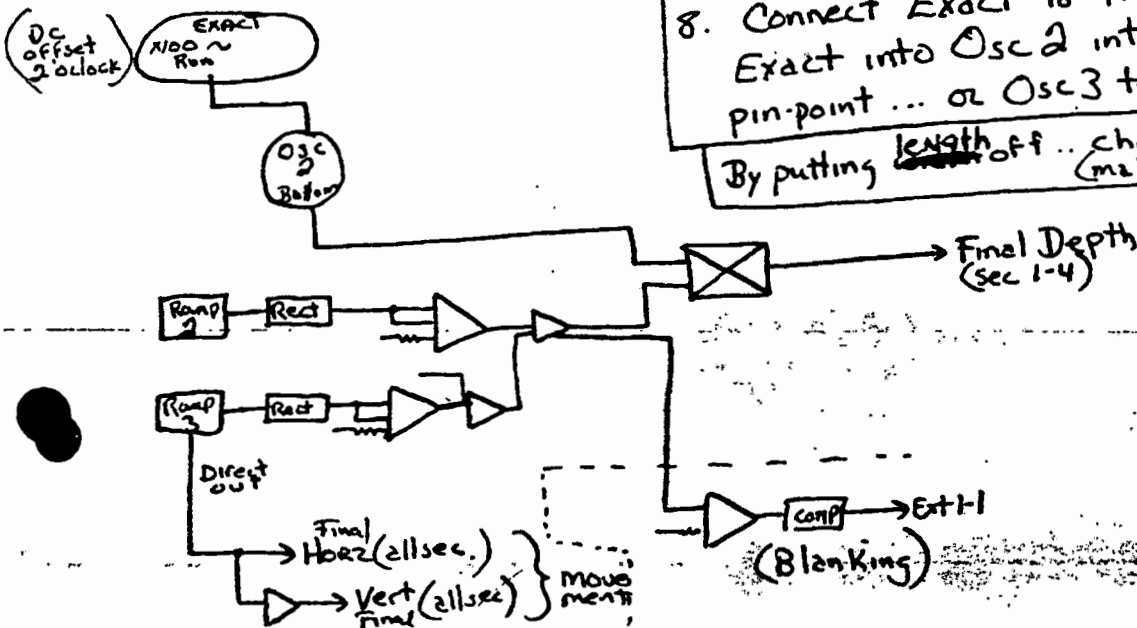
By adding Osc 2 into 3 + changing Depth Control (int a feed)
 also 90°

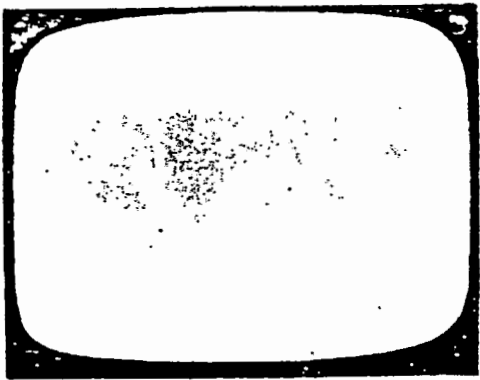


Sparkles & Twinkles

1. Divide into 4 sections
2. Fold all to a line (length)
3. Rotate for proper angles
4. Bring depth to a dot
5. Position all dots in center with Final Horiz + Vert
6. Bring depth up, rearrange lines with Axis
7. Bring depth back to a dot, set bias ramp
8. Connect Exact to final depth or Exact into Osc 2 into final depth (make pin-point ... or Osc 3 to final depth

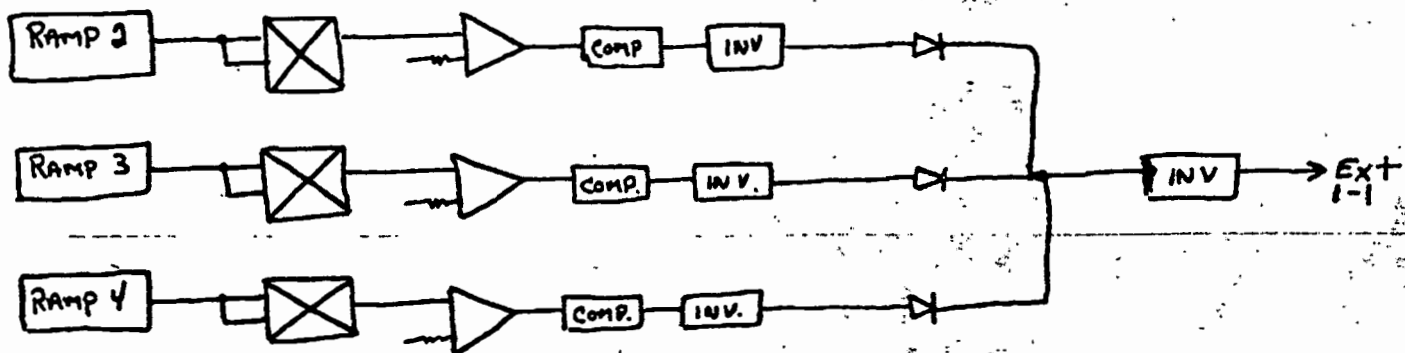
By putting ~~length~~ off ... changes twinkle (makes more points)



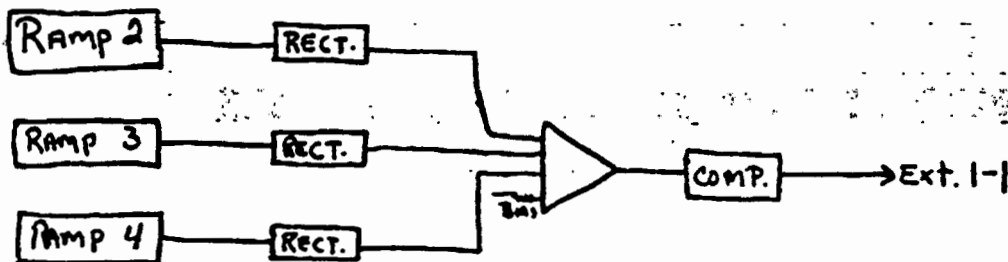
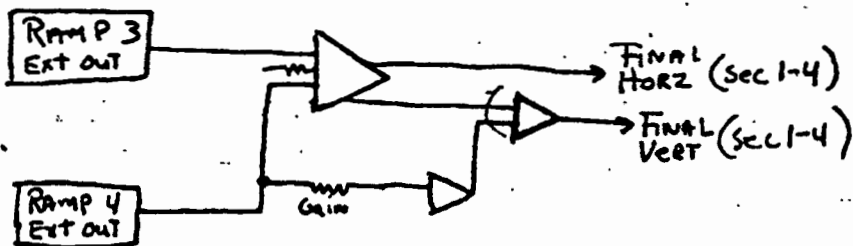


MOVING TWINKLE
(two ways)

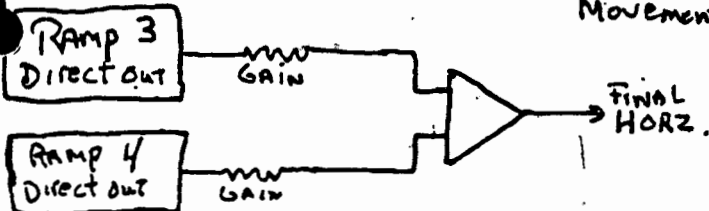
① Form star ... ② Osc 3 into WIDTH (sec 1-4)

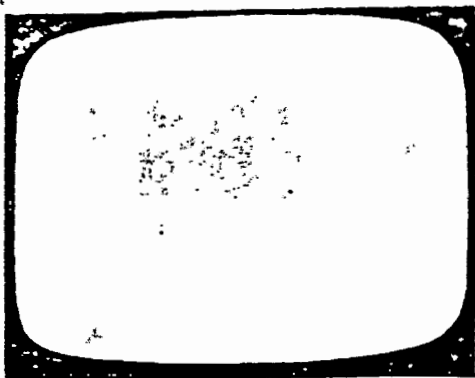


BLANKING ON and OFF
Movement



BLANKING ON and OFF
Movement





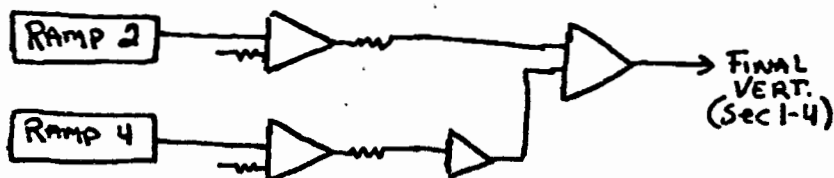
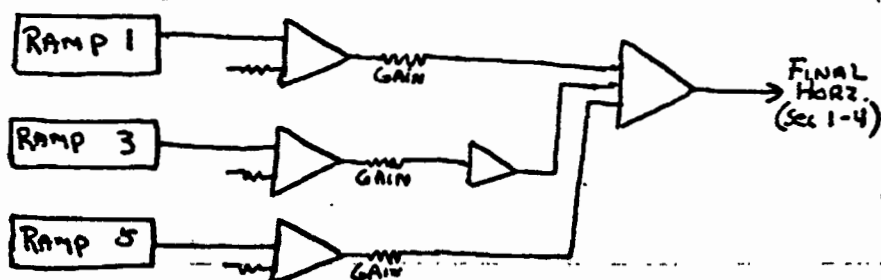
Twinkle move in a Circle

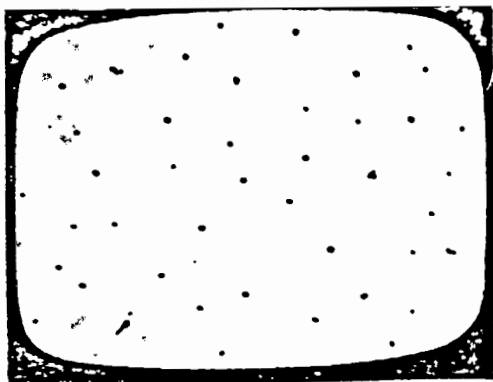
1. BUILD TWINKLE

(EXACT $\times 100$
.5 ~)

Ramp 1 move to Right
Ramp 2 moves down
Ramp 3 moves to Left
Ramp 4 moves up
Ramp 5 moves to Right

Must Adjust
Rate and Ramp
trigger time very
precisely so
circular motion
happens



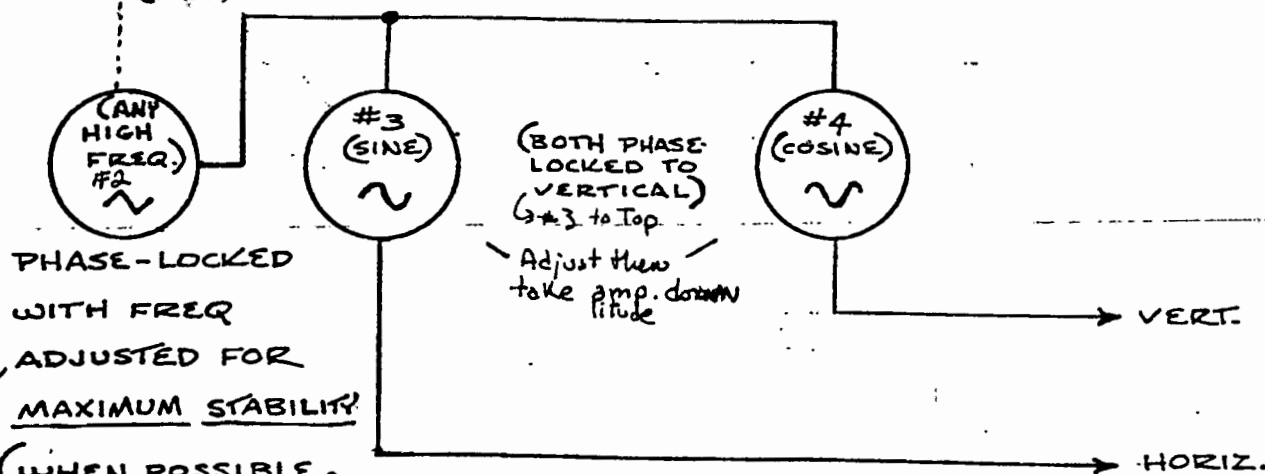


STATIC STAR FIELDS (ALSO CALLED "NIGHT SKY" BACKGROUND)

TAKE RASTER TO A DOT (DEPTH TO ZERO, OR LENGTH AND WIDTH TO ZERO)

Gives outward movement better squared Ramp Mode Run

Exact out (do last)



(WHEN POSSIBLE, USE AN EXACT OSC. IN A TRIGGER MODE FOR THIS PURPOSE)

ADJUST BLANKING WITH HORIZ. SEGMENT #1 SO THAT ONLY THE END OF EACH RASTER LINE IS SEEN (IN ENABLE adjust)

outside - to Bottom position

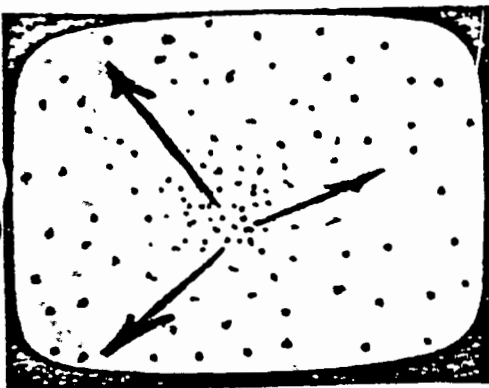
Switches inside Animation Controller

#2 (A) to PRG

(B) N+V

(C) +10

MOVING STAR FIELDS



BEGIN WITH A STATIC STARFIELD,

SET SYMMETRY TO "↗" RAMP
SET OFFSET TO "PLUS" OR "MINUS"
(NOT "BIPOLAR")

EXACT 505 IN FREE-RUN

SQUARE WAVE OUT
RAMP OUT

(PATTERN MODULATION)
TRIGGERED EXACT OUT

WHEN SYMMETRY AND OFFSET ARE SET ACCORDINGLY, THE SQUARE WAVE OUTPUT WILL DELIVER A PULSE CO-INCIDENT WITH THE FALLBACK OF THE SWEEPING RAMP. THIS PULSE APPLIED TO BLANKING WILL SHUT OFF THE RETURNING LINES LEAVING ALL THE "STARS" MOVING IN ONE DIRECTION ONLY ("OUT" OR "IN" DEPENDING UPON FREQUENCY SETTING).

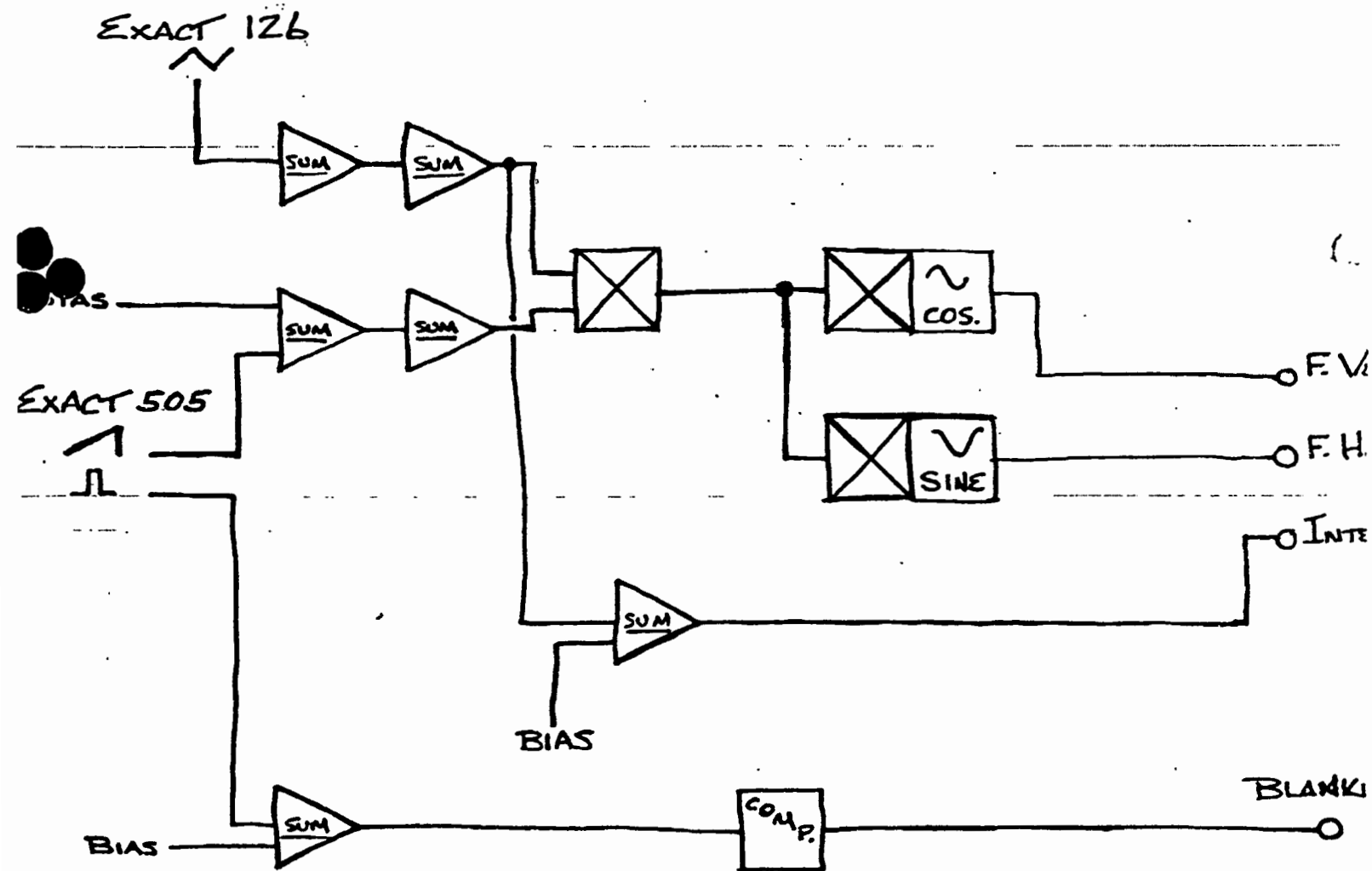


THE SQUARED RAMP WILL SWEEP THE STARS OUT IN A NONLINEAR MANNER, THEY WILL SPEED UP AS THEY MOVE OUT, CAUSING ADDED "PERSPECTIVE" EFFECT.

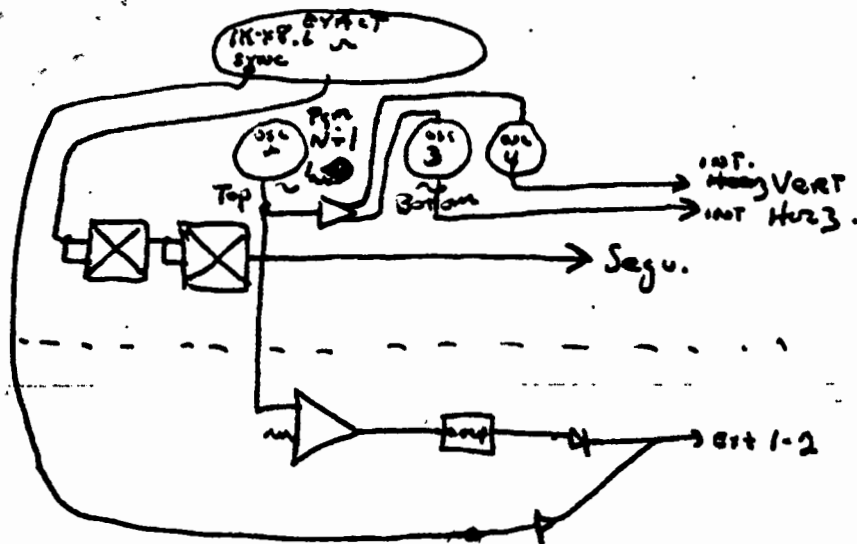
TO UNBLANKED PORTION OF RASTER (HORIZ SEGMENT BLANKING INPUT #2)

REVISED STARFIELD

1. RASTER TO A DOT
2. SINE INTO $\frac{H}{V}$, COS. INTO $\frac{E}{V}$.
3. EXACT 126 TRIG. BY H. RAMP (OR H. RESET)
10 K. RANGE; MULTIPLIER: $.1 \times 5$; AMPLITUDE MAX.
D.C. OFFSET OFF; TRIANGLE WAVEFORM
4. EXACT 505 IN FREE RUN. RANGE $\times 1$; MULT. 7×4
OFFSET NEG.; SYMMETRY \nearrow . AMP 1 SQUARE OUT (TO
BLANKING); AMP 2 TRIANGLE (RAMP) OUT.



Russ's STARFIELD



- 1.) Cube Exact into Segu.
INT to Final
(length almost to line vary)
 - 2.) Sine/Cosine Osc 3+4 into Horiz + Vert (initial)
(Osc 3 wrapped around about 1-1/2 times vary)
 - 3.) Osc 2 into Osc 3+4
osc 2 select P_m N+1 9 (to clock)
- Freq. - ② Allward 30'clock (low Freq.)
Amplitude - Full up

Adjustment of Sequence Bias P_m with exact bias makes center circle small in middle

Blanking
Ext 1-1 enable → Blanks off top dots (stars)
2'clock

Syn out diode into Ext 2-1

Osc 2 into Bias sum amp into comp into diode - Ext 2-1

(will blank off static rings)
(if need be....)

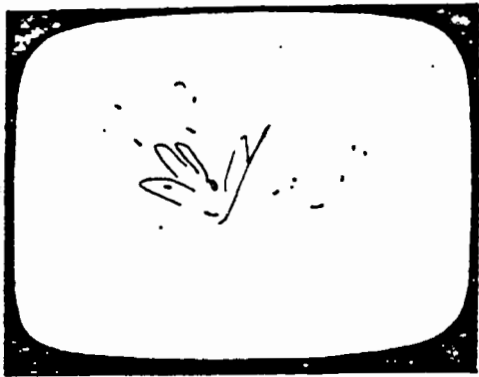
Bias + amplitude on Exact very critical for stable movement...

② offset ② clock ② offset ② clock

- Also want stars to blank on a beginning in center not in middle

- Also intensity comp want stars dimmer in beginning

② - not comp towards extinction



sort of
Starfield...

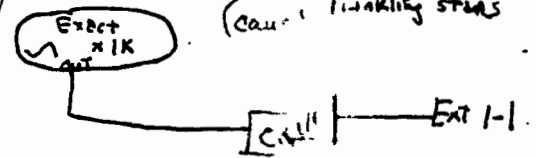
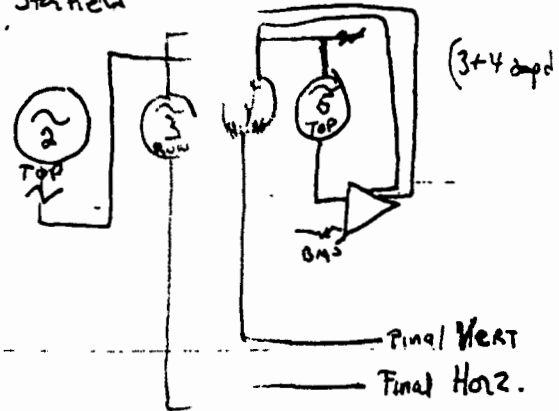
Osc 2 - Per 12-1K

- N.1

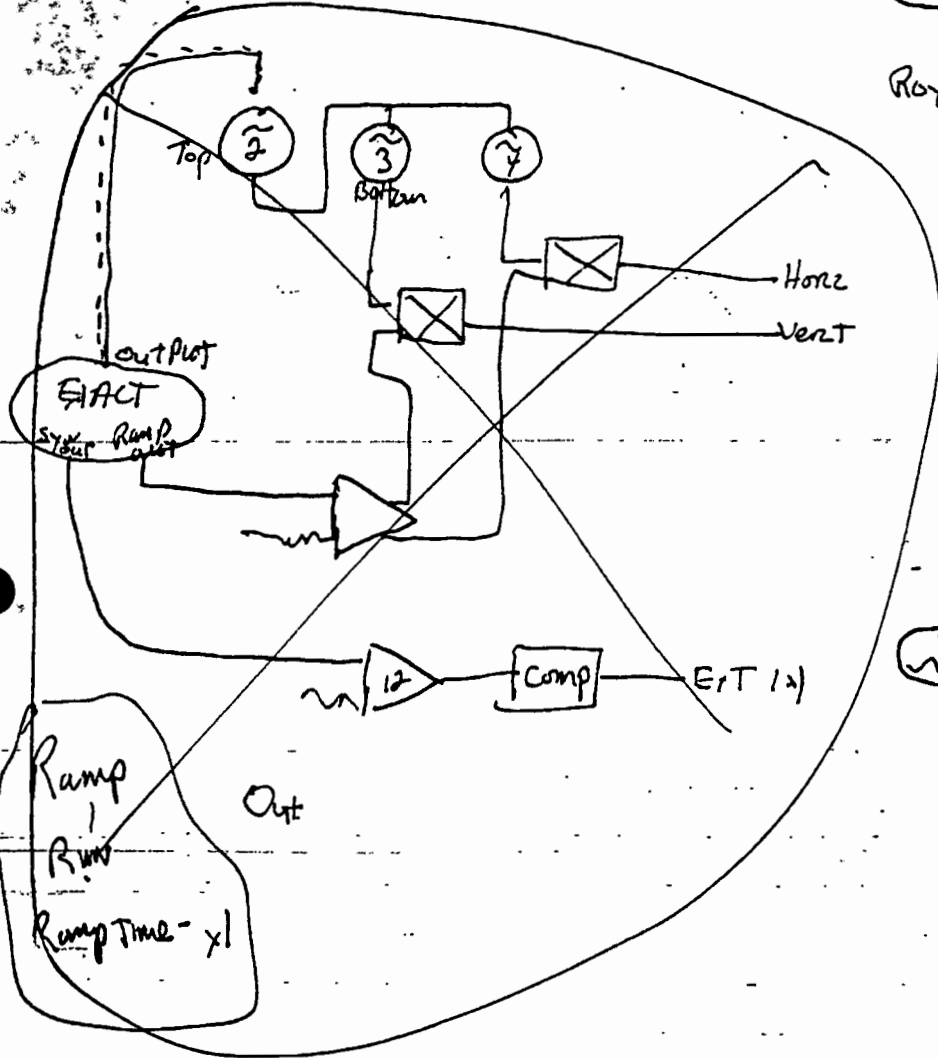
- +1C

1. Form a circle with 3+4 (then 4+5)
2. Form nice spir with 2+5
3. Black most of spir off running stars...

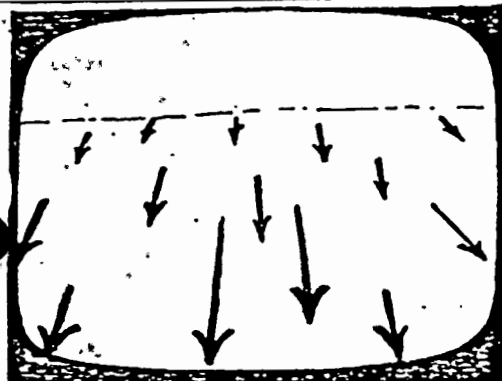
Roy's Starfield



(causing blinking stars)



IMPROVED SLIT SCAN EFFECT, (SPEED FAIRINGS AND SIZE-MOTION DIFFERENTIAL)



DIRECTION OF SCAN: \leftrightarrow
LENGTH TO ZERO

SYMMETRY TO "1" (RAMP)
OFFSET TO "PLUS"

EXACT 505b, RUN MODE
(\sim OUT)

SQUARE
OUT

RAMP
OUT

RAMP²
OUT

POSSIBLE INVERTING
NECESSARY
(SUMMING AMP)

SEQUENCE

BIAS
POT

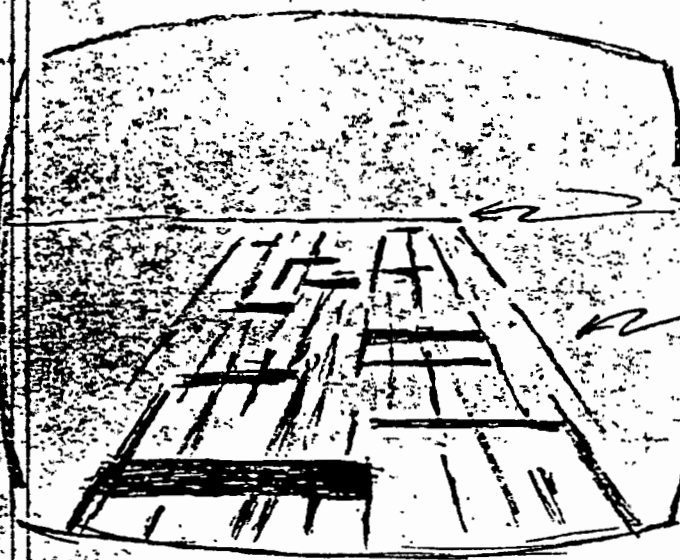
SUM

FINAL
HORIZ

HORIZ.
RAMP

SUM

TO SEGMENT
BLANKING
(SHUTS OFF RETURN-
ING SCAN LINES)

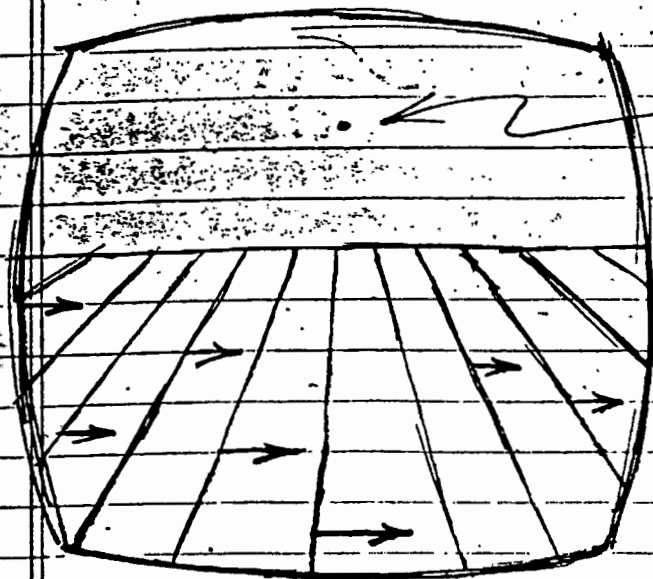


PERSPECTIVE ADDED TO ARTWORK WITH OSCILLATOR ON FINAL DEPTH (FRAME LOCKED TO "PINCH" ARTWORK:



TOP OF "PINCHED" RASTER IS BLANKED. BLANKING LINE APPEARS STATIONARY BY APPLYING VERT. RAMP TO BLANKING INPUT, THROUGH SUMMING AMP WITH BIAS CONTROL, BIASING THE VERT. RAMP TO CHANGE THE POSITION OF THE BLANKING LINE.

ARTWORK IS RAMPED THROUGH VERTICAL AND DEPTH WITH A SEQUENCE RAMP.



VANISHING POINT
APPEARS TO REMAIN
STATIONARY? WHILE
PLANE MOVES HORIZON
TALLY.

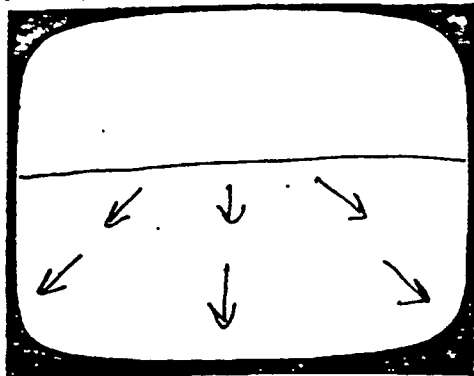
#5

②

FINAL
DEPTH

= "PINCHES" ARTWORK (OSC. LOCKED
TO "FRAME")

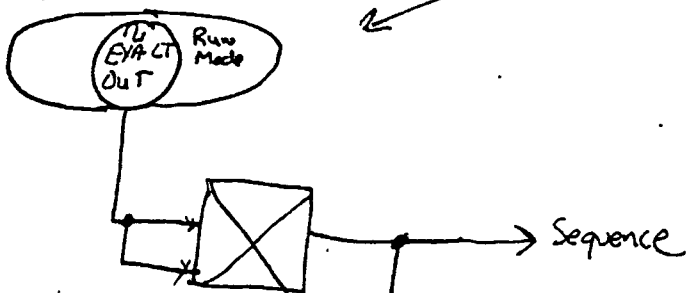
- 1.
2. ADD PERSPECTIVE LINES BY SUMMING "HORIZ. RAMP"
WITH OSC. #2 SET TO "PROG", "N", "÷1" AND SET LINE
CHARACTER WITH 12 POS. SWITCH. APPLY TO SECTION
BLANKING.
3. SET NUMBER OF PERSPECTIVE LINES BY ADJUSTING OSC.
FREQUENCY? (LOCK TO "FRAME" FOR STATIONARY
LINES)
4. LATERAL MOTION CAN BE ATTAINED BY RAMPING
"HORIZ. AXIS" OF SECTION.



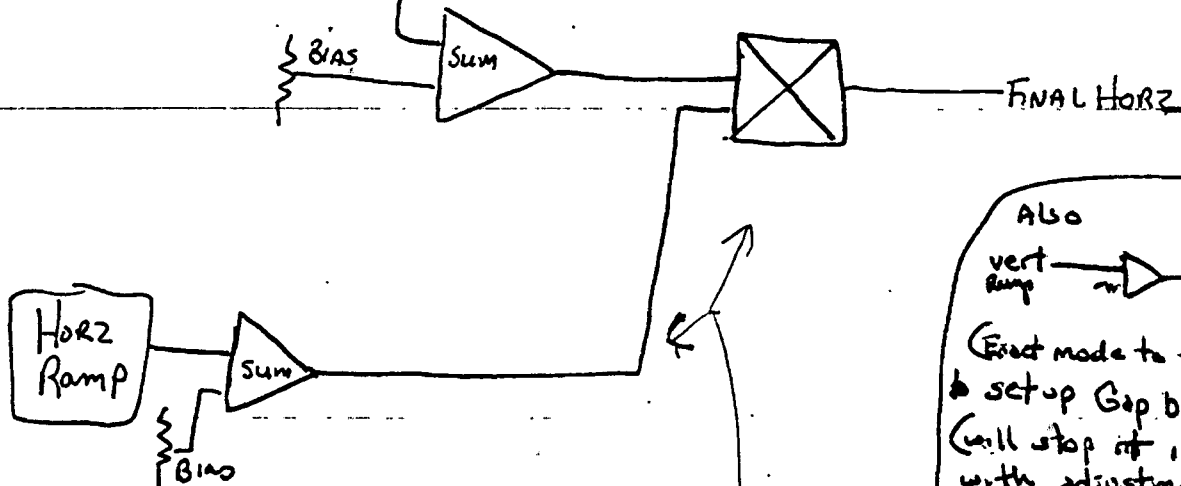
Slit Scan :
Length to Zero

af

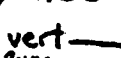
- try to revise. (see below)



when setting up line (crosshatch adjustment of graphic cameras)
Vert + horz gains + offsets
very critical for max. amt of
horz lines (since Exact usually not 1K)
+ for making lines all inge at raster
ends....

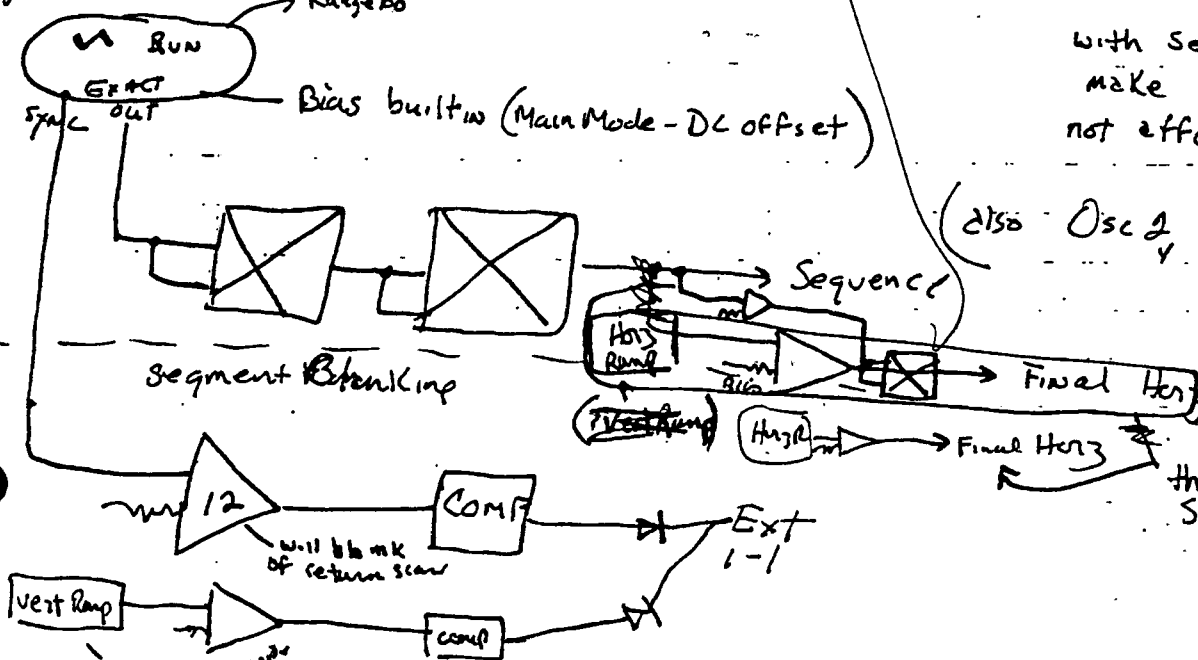


Also

vert ramp \rightarrow  \rightarrow Exact trig

(Exact mode to trig) will help
to setup Gap between ends
(will stop it in center screen
with adjustments so ends
can be lined up cam going
adjusted)

Roy's Slit Scan @ Russ modifications
→ Russ on

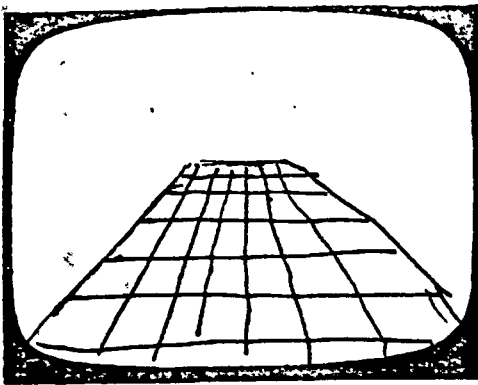


with sequ. make final a dot
not affected by int. mov

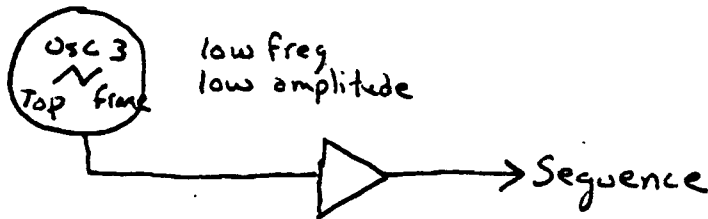
(also Osc 2 into Int Herz (Vest))

* this will widen out
Slit Scar

10.11.11 ✓ 10.11.11 10.11.11 10.11.11 10.11.11

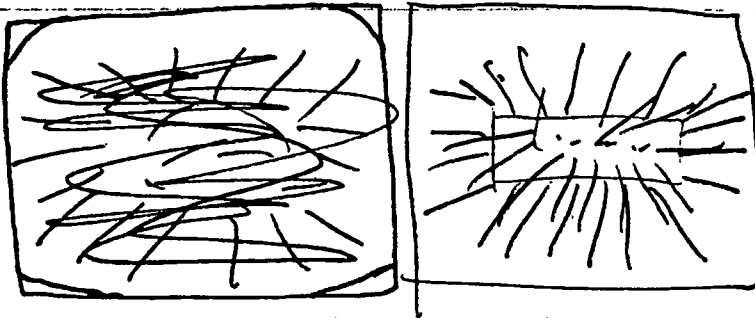
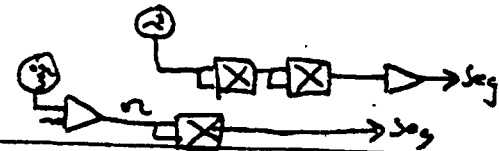


Static SltScan (Plane @ perspeti.
(STARWARS lettering)
(Run crawl thru via posterization
(into soft wipe)



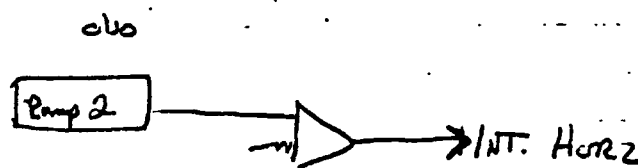
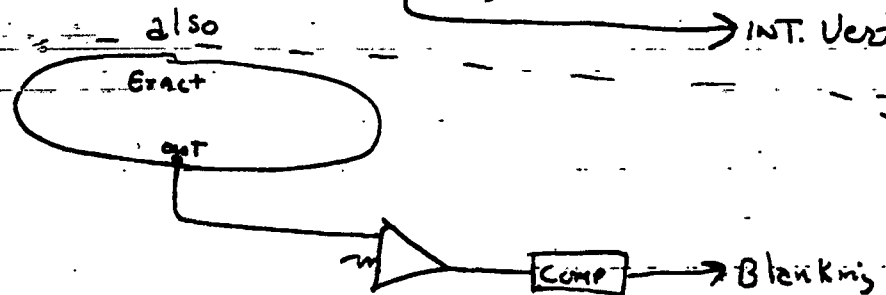
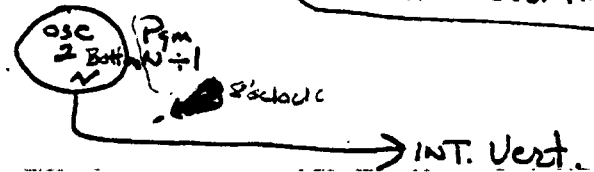
1.) Final at top with Horiz Osc
on, tweak sequence till final
steps in position, int. move

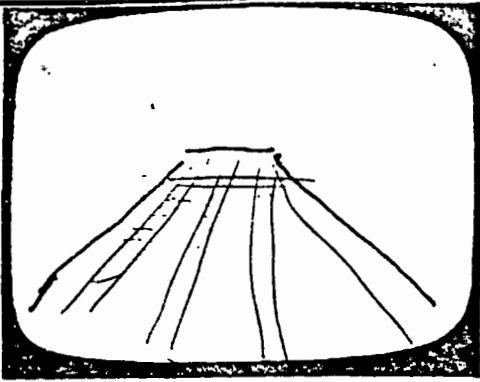
2.) for more extreme perspeti.
Square or cube
osc out



Spoke type Animation

⊕ same patch as above
with (input either convergence
vert lines only
OR cell of vert lines



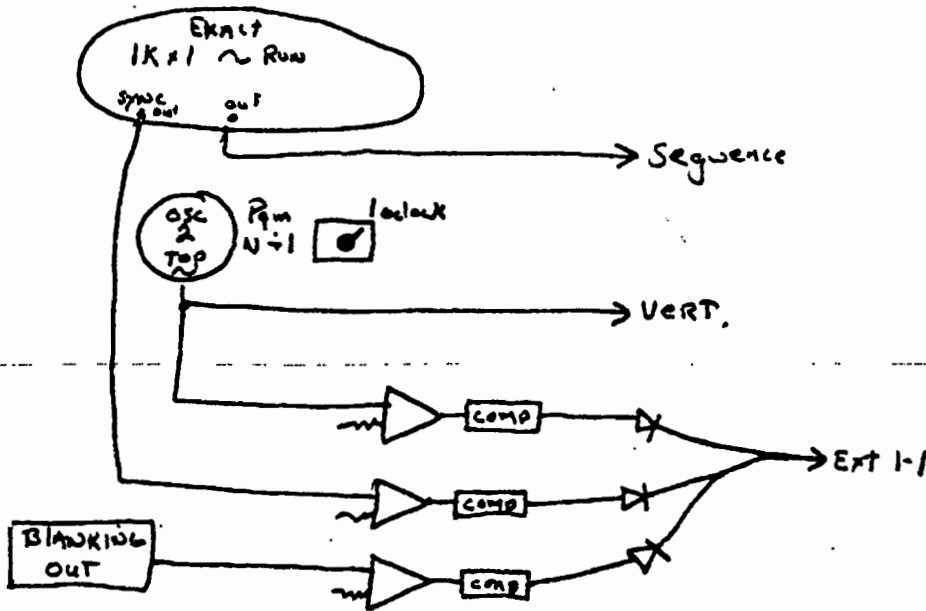


Christmas trees +

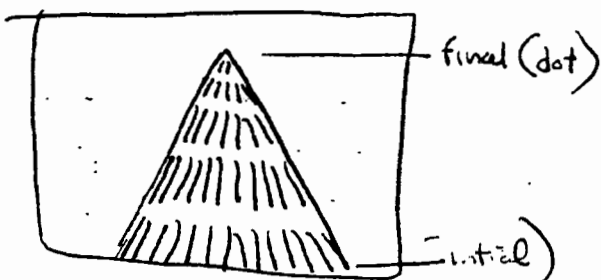
Slit Scan @ Hi freq Osc
and Blanking

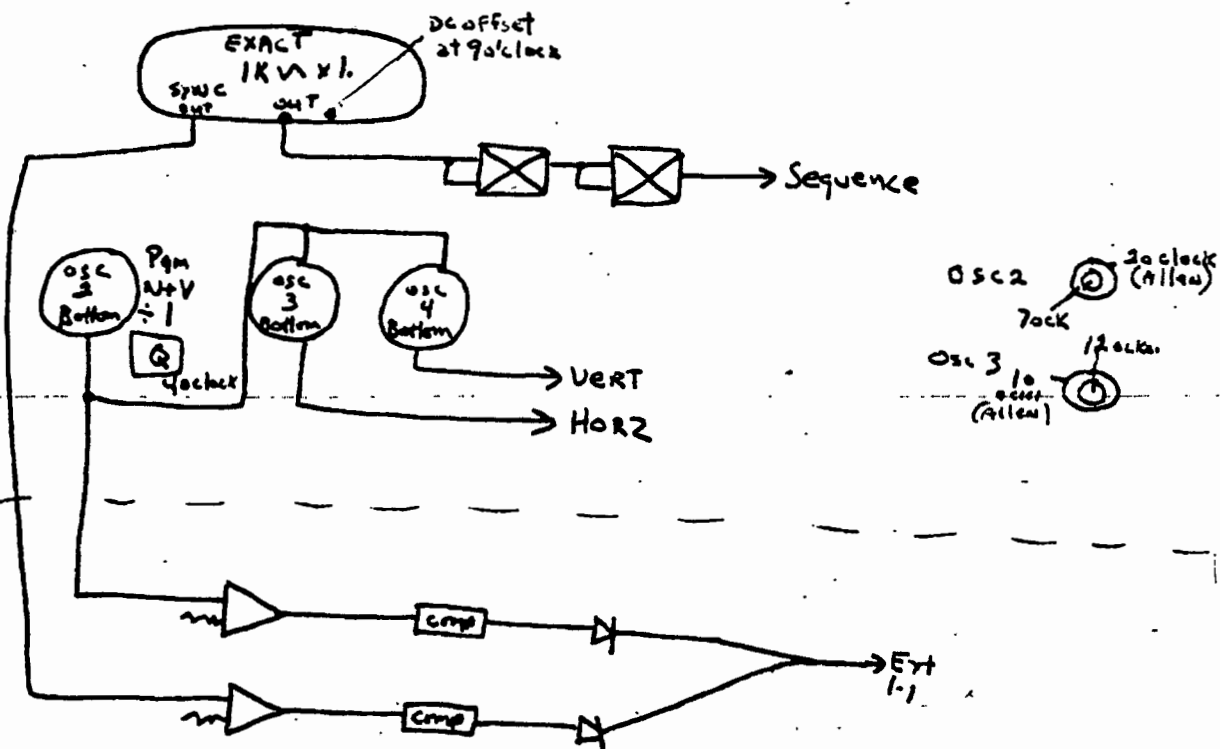
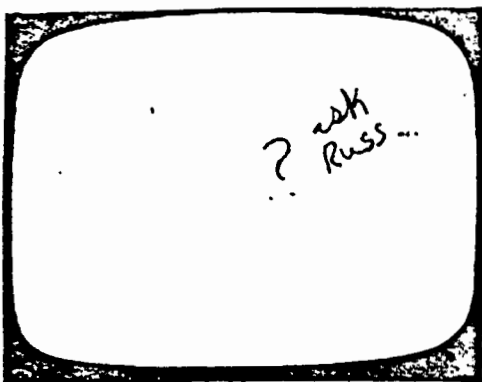
Length to a line

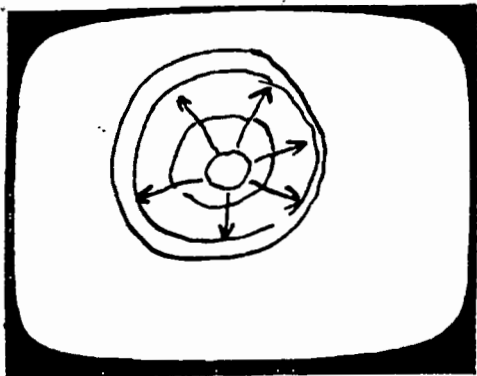
Top is initial
Bottom is final



also make Christmastree

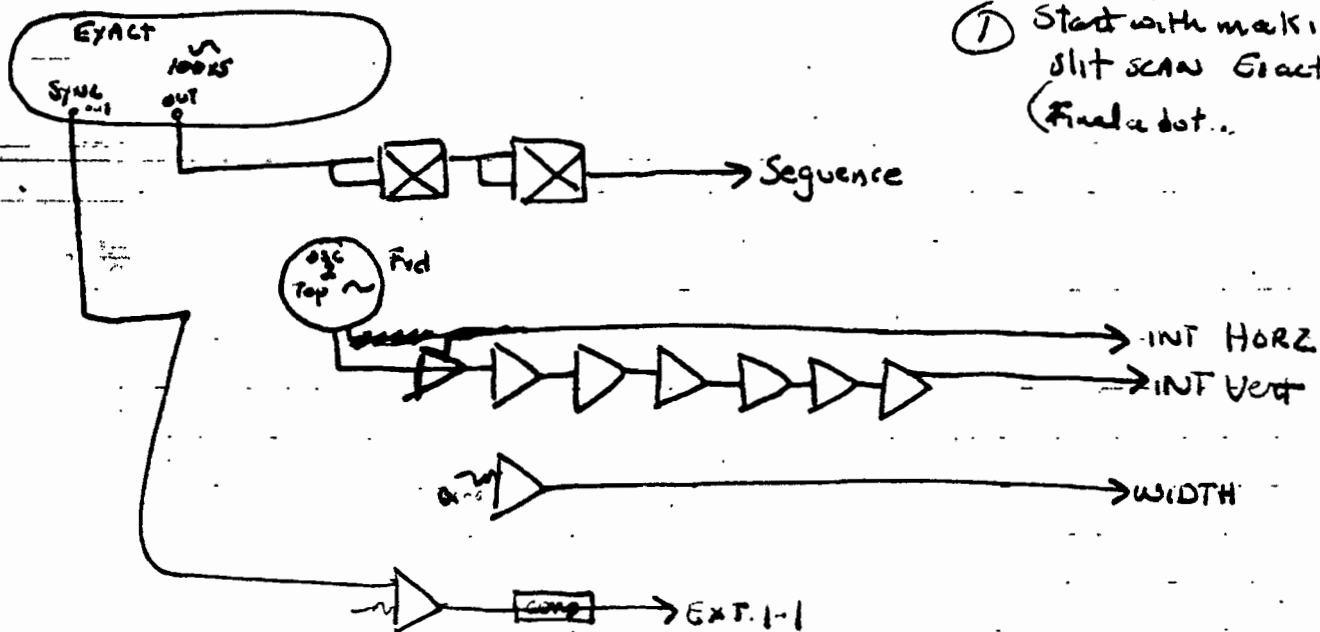
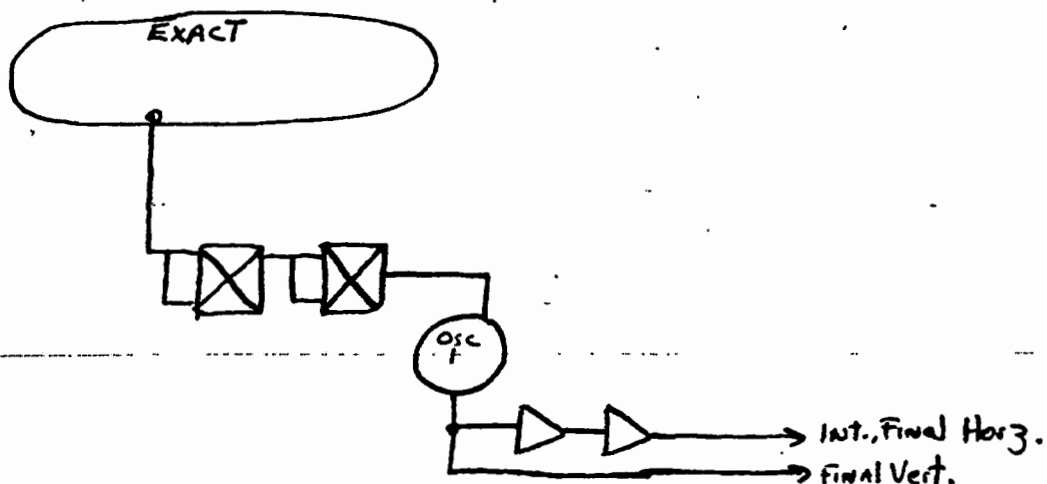






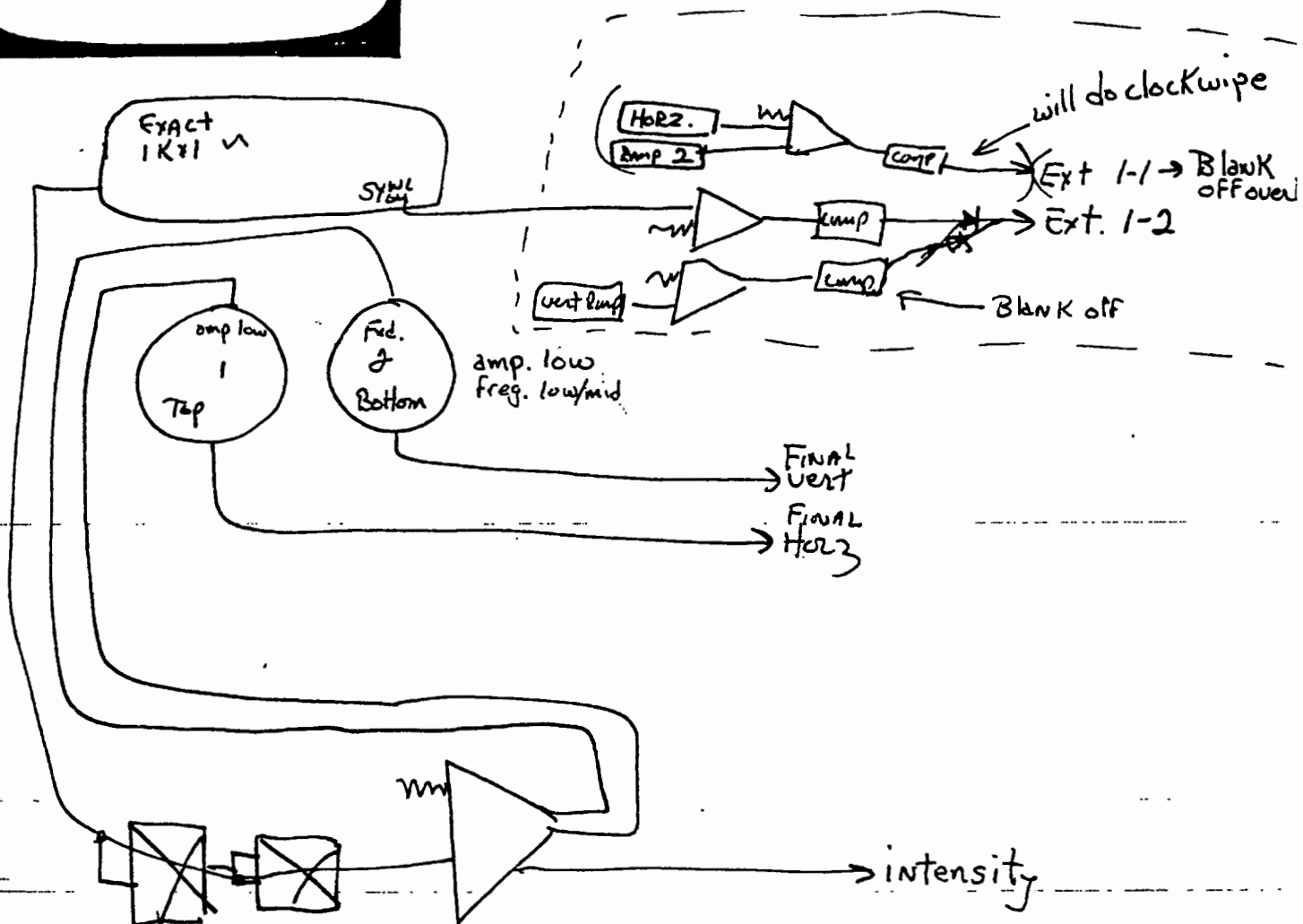
Circular Slit Scan

1. Bring to a dot
2. Build circle with osc. 1
3. multiply Osc 1 @ Exact
4. Add blanking



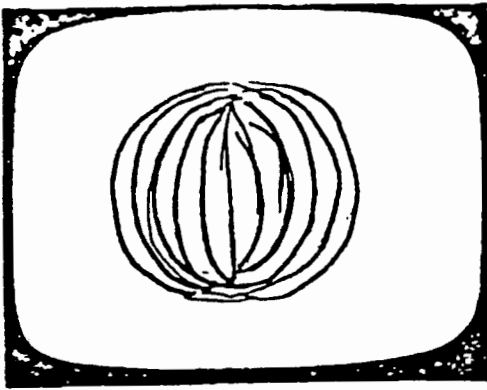
① Start with making Reg
slit scan Exact into Seq
(Final a dot..)

make highfreq sin cosine @osc 1+2
add cubed EXACT



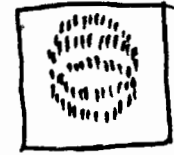
KASTER BALL

two version

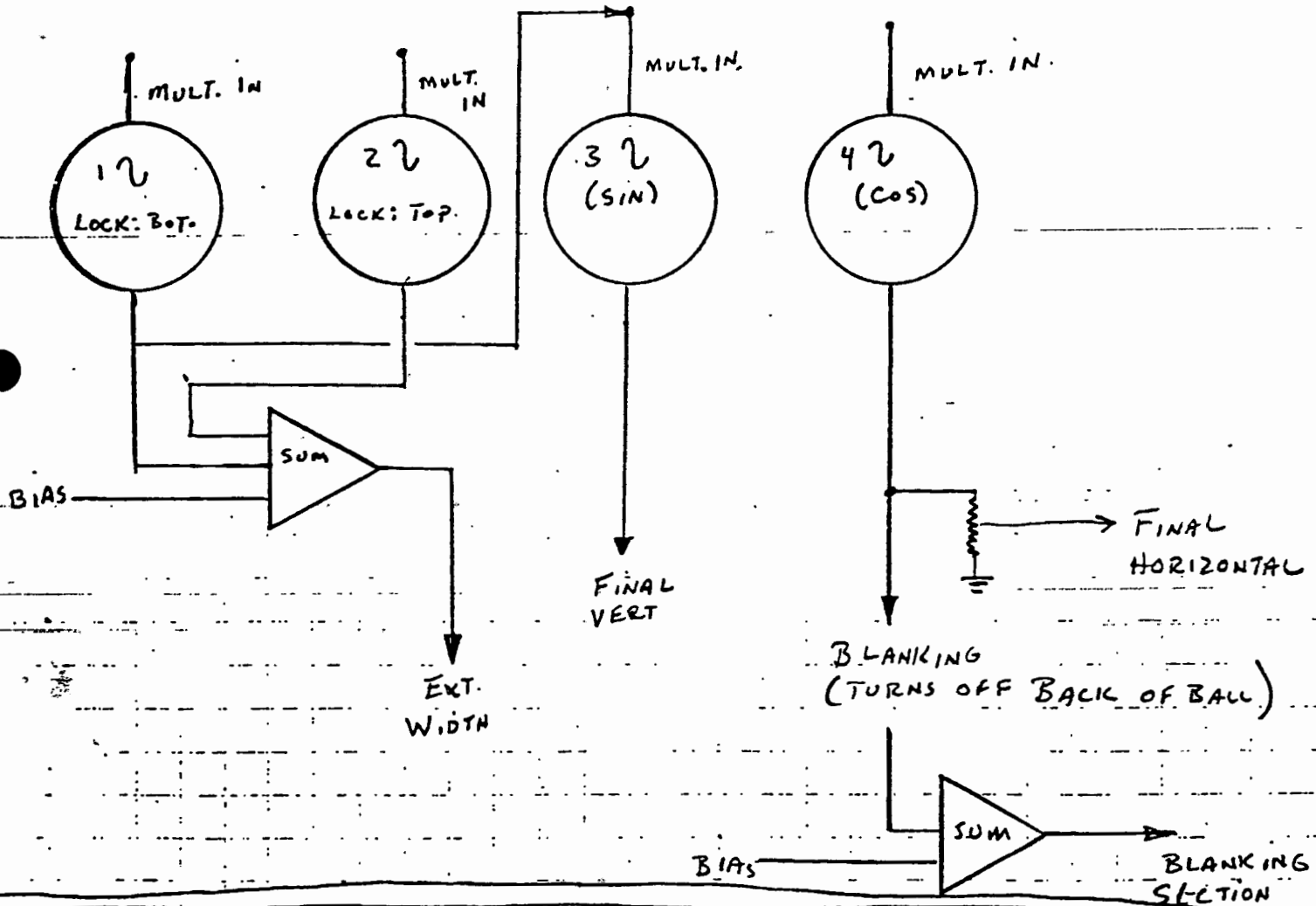


DIRECTION OF SCAN

(USE 90° SWITCH @ CPU OR ROTATION)



3
↑
M
↑
J
↑
lock



(Ref's) Globe

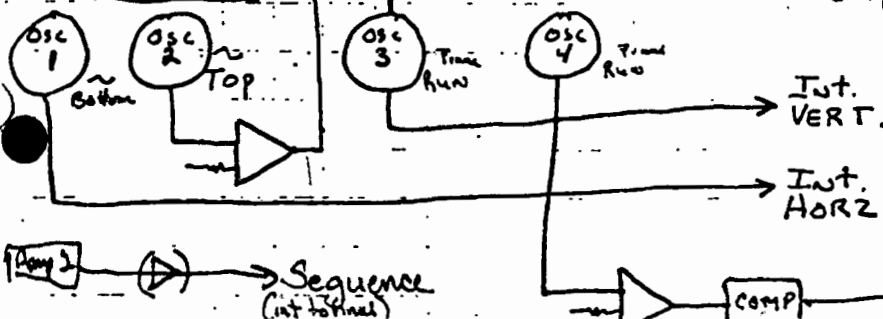
use 90°

(Sequence to Int. (in globe))

Length to A Line

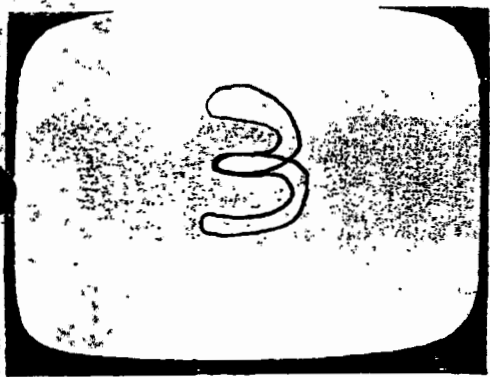
Final to a Dot

(Here with sequence give illusion of moving from big to small)
(also send same signals to other computer to make clouds over globe)
(Not address??)



With Ext. 1-2 &
Ext 1-3 &
Blank off edges

Maths for 3's 6's 9's or S's



Depth to a dot

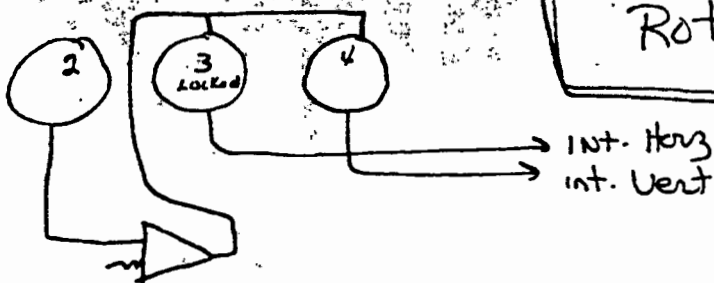
2 sections - (cut ~~osc~~ cosine into 1/2)
Seg. to int.

Sine/cosine .. @ 3

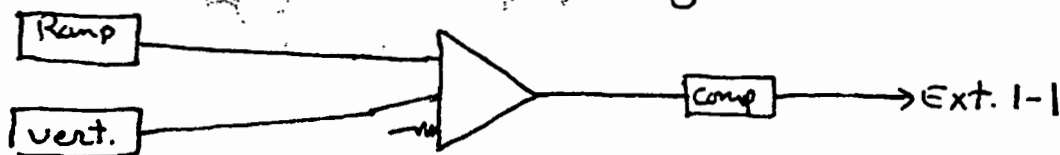
osc 2 - use to fatten up

Rotate - section ..

osc 3+4 amp. will control
size of curve



Blanking - 1 section



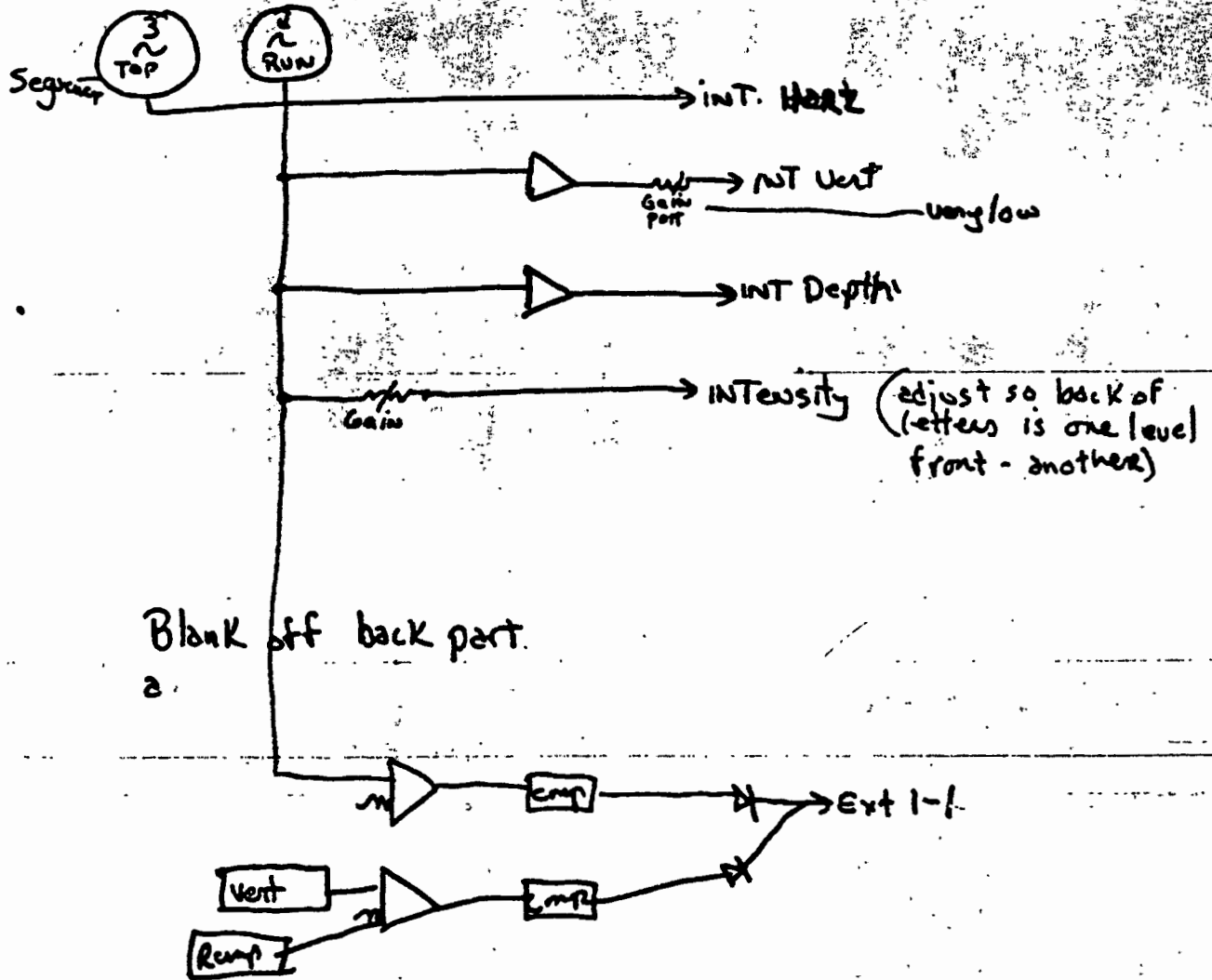
Wipe will blank on both section...

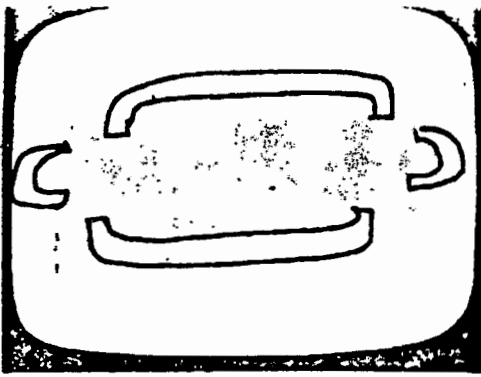


Coke Roll @ Depth

90°

Fold to a line





Pieces assemble separately
then all move up together
(same spacing)


- 1.) Int to final
- 2.) All sections to a dot
- 3.) @ final vert+horiz center all dots
- 4.) Bring up depth to proper size
- 5.) Set positions @ axis

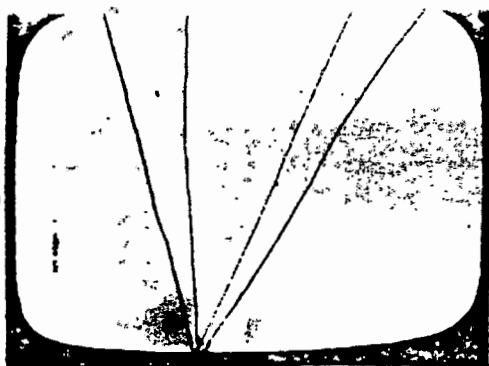
R1 → Seq. (sec1)

R2 → Seq. (sec2)

R3 → Seq. (sec3)

R4 → Seq. (sec4)

R5 →  Final Vert.
Final Depth



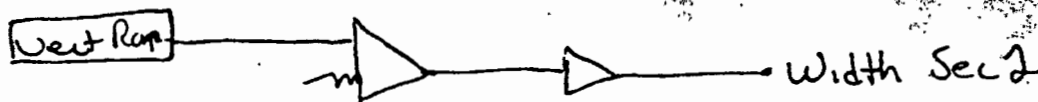
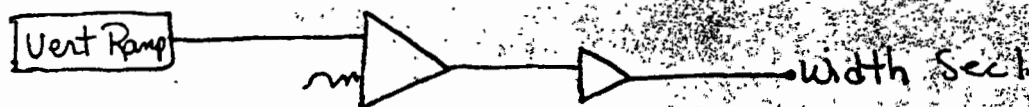
Axis Point

Search Lights

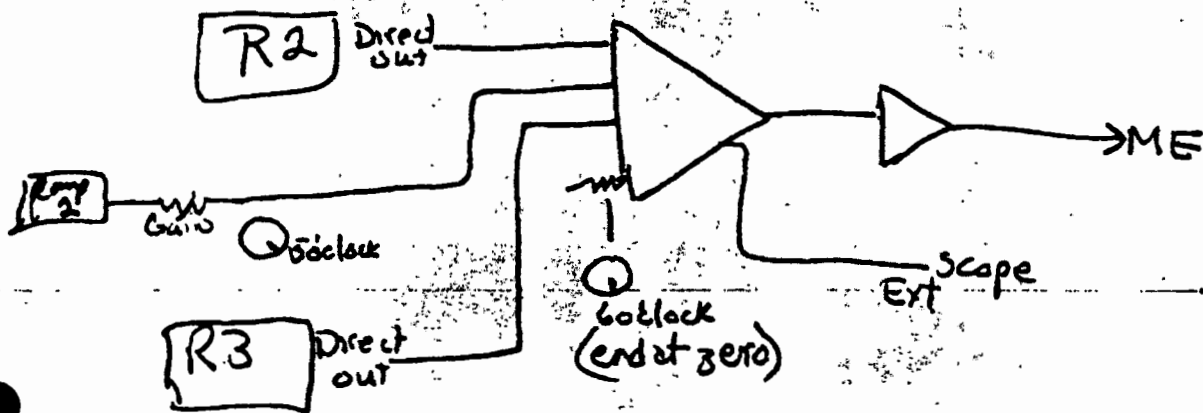
2 Sections (more possible)

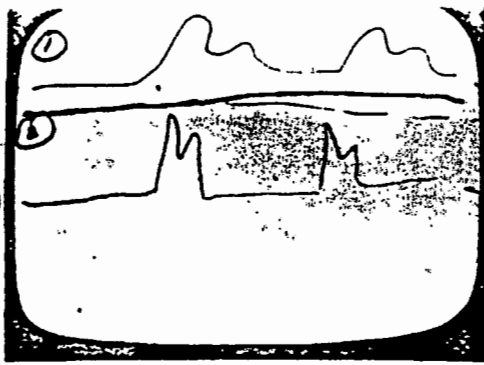
Set int + final &
then cont. osc.

(very) Soft focus on CRT + ^{Scan} Camera



Intensity Sec 1+2



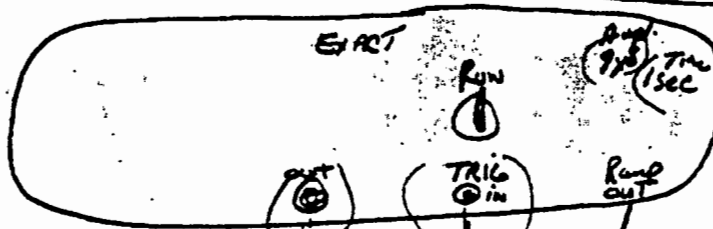


Heartbeat Pulse

Raster to a dot...

Animate with trails...

- 2 ways -
- 1) Audio Modulates Vertical
 - 2) Audio Triggers Exact which sends Pulse
- (in both Exact triggers pulse(Hz))



Final Hz (Cause beat across)

Final vert

(1 way)

Audio

Pass Filter
300

Analog Exp

DB Gain
60

Function
A

Load
EXT

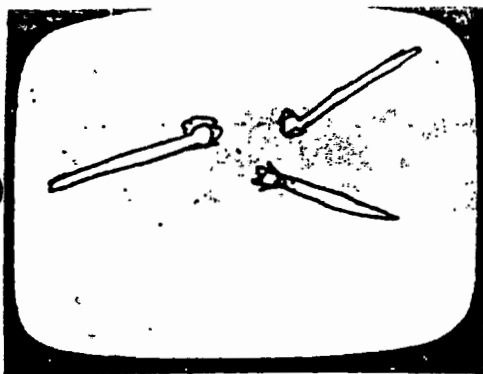
Output

Final
vert.



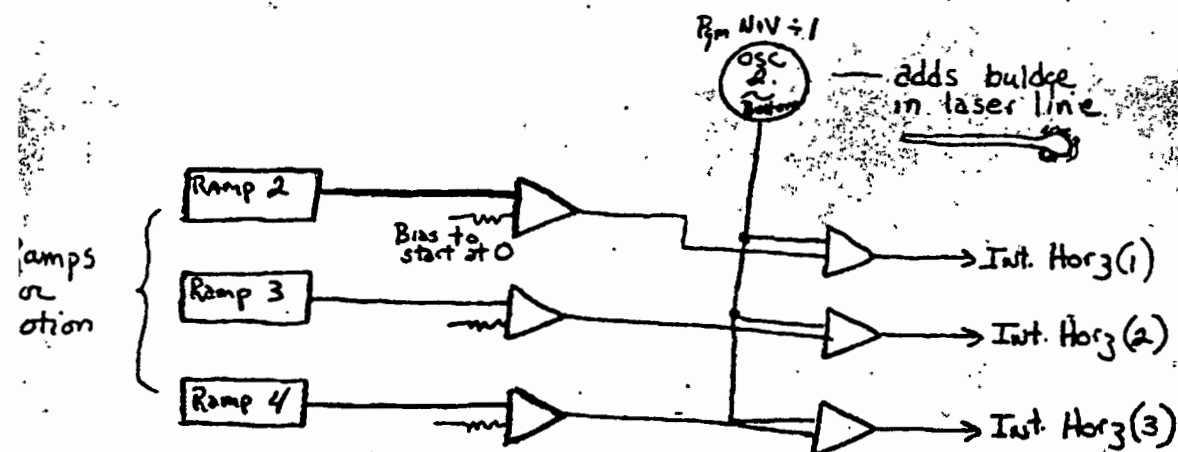
Checkerboard Delay (1 Frame)
(NBC Baseball)

- 1.) Scanimate has checkerboard matt
- 2.) FS in is source (ie Cam 1)
- 3.) ME 1 ~~Cam~~ SCAN Keyed over Cam
- 4.) ME 2 SCAN Keyed over Aux 1 (FS out)
- 5.) M 3 Mix between ME 1 + ME 2

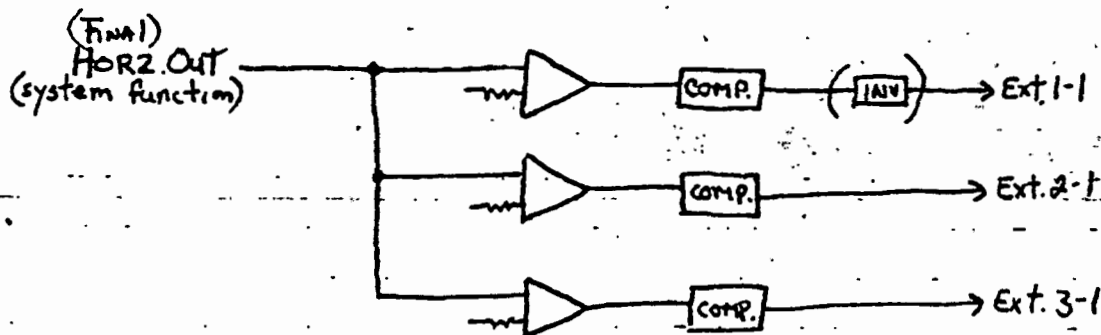


LASER BEAMS (3 section)

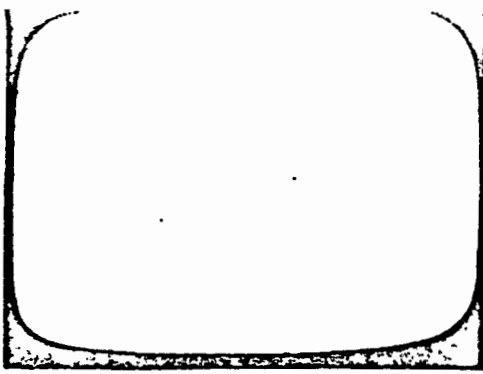
- 1.) Divide into 3 sections
- 2.) fold to a line
- 3.) Rotate for proper



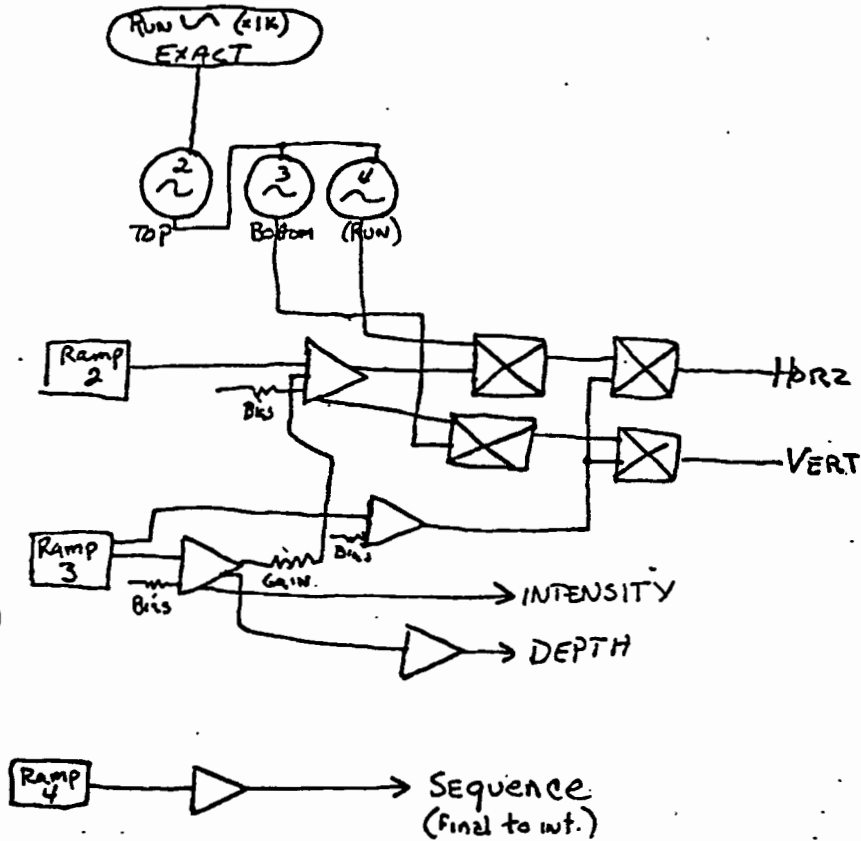
BLANKING

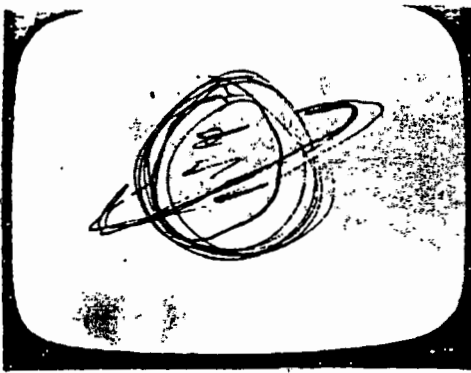


Set bias so final horz determines window into which lasers disappear



- start at dot
- Animation starts
- Animation zooms out
- Animation Resolves to U'rd
- Word Zooms to a dot





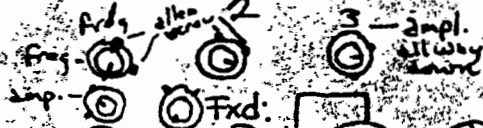
Good Globe @ ring
 Fine to Int.
 Length to a line

(Rotate 90°)
 (Rotate for tilt (little less than 90°))

(Adjust width - $osc 2 + 1$ for roundness)

osc 2 - controls side to side thickness } when
 osc 1 - controls top-bottom thickness } rotated

Scen 1



1 Bottom

2 Bottom

3 Run

4 Ave

Bias (at 6 o'clock)

(For osc 3 & 4 try putting in ~ position)

GUS

ME1 Scen 1 Key Ext 1 Key
 Scen 2 Audio

ME2 Scen 2 Key Putt Limit Ext 4
 Eff 1 Audio
 Wpr 40 soft

ME3 Putt Limit 3 Soft
 Eff 2 (background) try

int. vert.

int. Horiz

Ramp 9 Seg (Fine) to int.

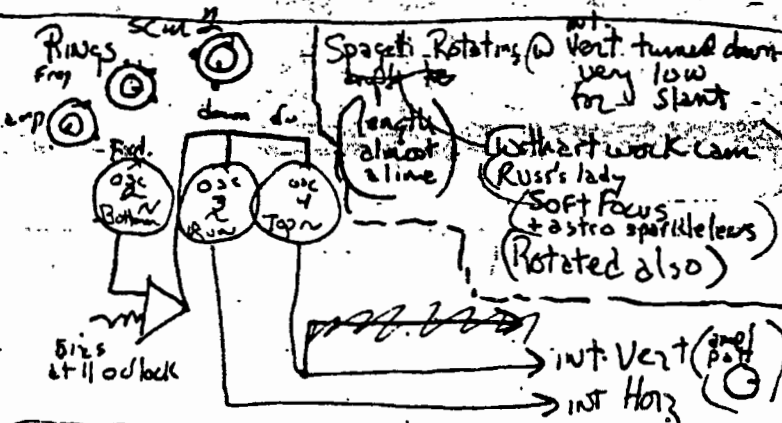
com.

Ext. H1

Vert Ramp

Ext 1-1

Enable
 Ext 1-2
 Play off



1-1 Enable

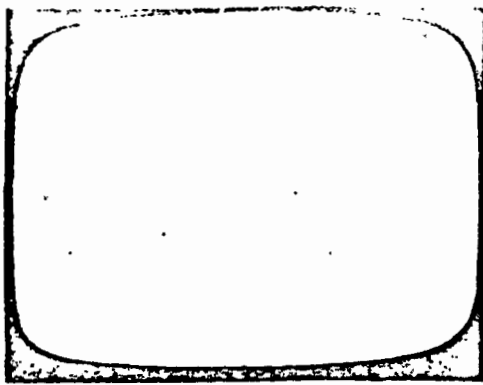
1-2 Ext

1-3 Enable

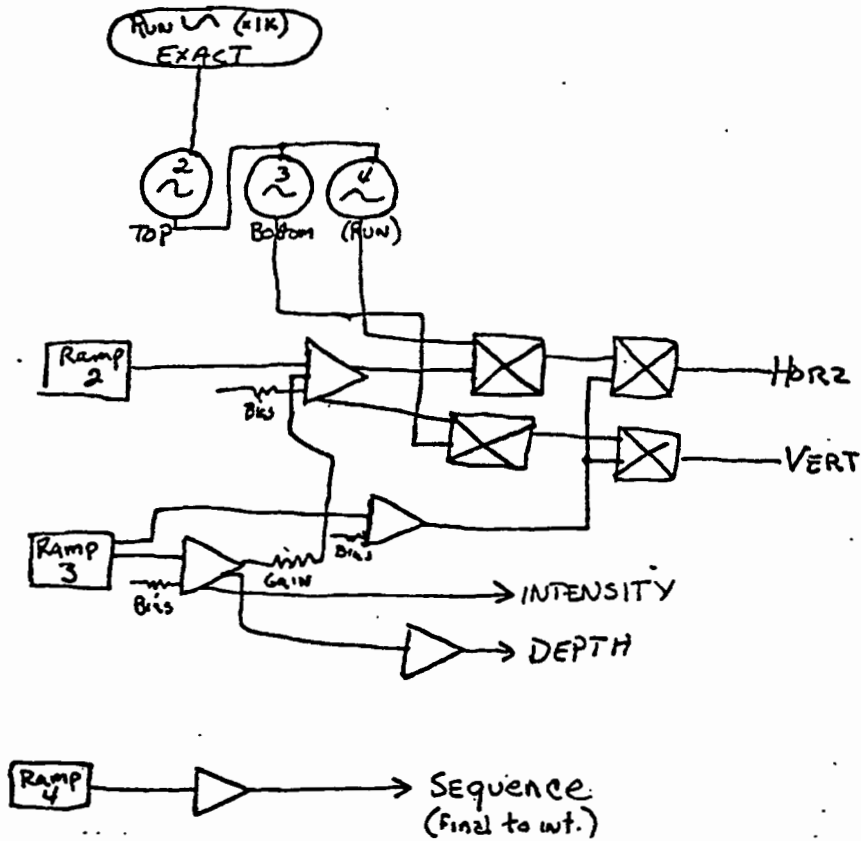
1-4 Ext

Spaceti Rotating @ Vert. turned down very low for slant
 (length almost a line)
 (without work cam)
 (Rus's lady)
 (Soft Focus)
 (astro sparkle lens)
 (Rotated also)

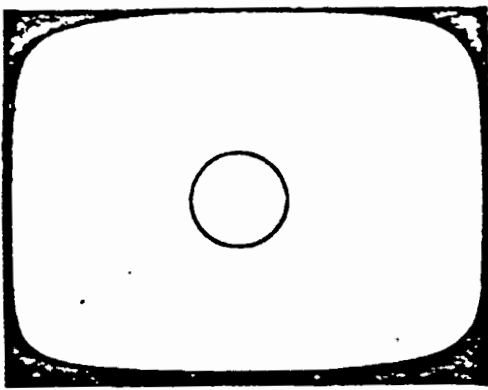
int. Vert (fine)
 int. Horiz



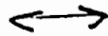
- start at dot
- Animation starts
- Animation zooms out
- Animation Resolves to world
- Word Zooms to a dot



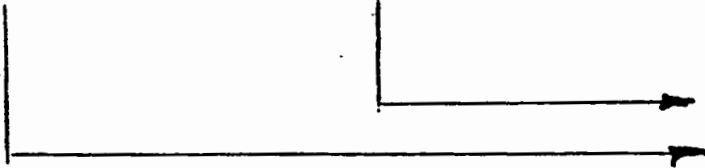
BASIC SIN/COS PATTERNS



DIRECTION OF SCAN



Adjust-Ampl. - low #3 + #4
Low freq for #3
Adjust-final Depth



HORIZONTAL (OR VERT)
VERTICAL (OR HORIZ)

WITH OSC. SET IN \sim PATTERNS ARE ROUND OR ELLIPTICAL
WITH OSC SET IN \vee PATTERNS ARE SQUARE (DIAMOND)

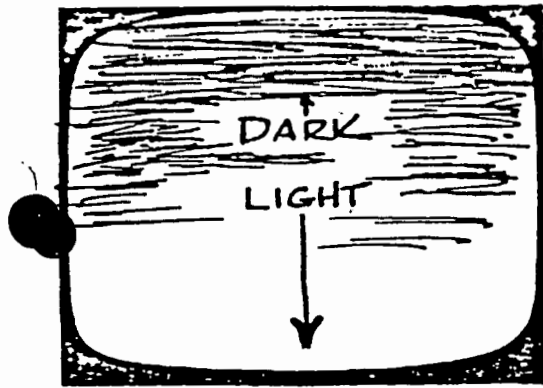
ADDITIONAL PATTERNS ARE DEVELOPED W/ OSC 1, 2, & 3
MULTIPLIED THROUGH #3 & 4.*

MOTION IS PROVIDED W/ RAMPs

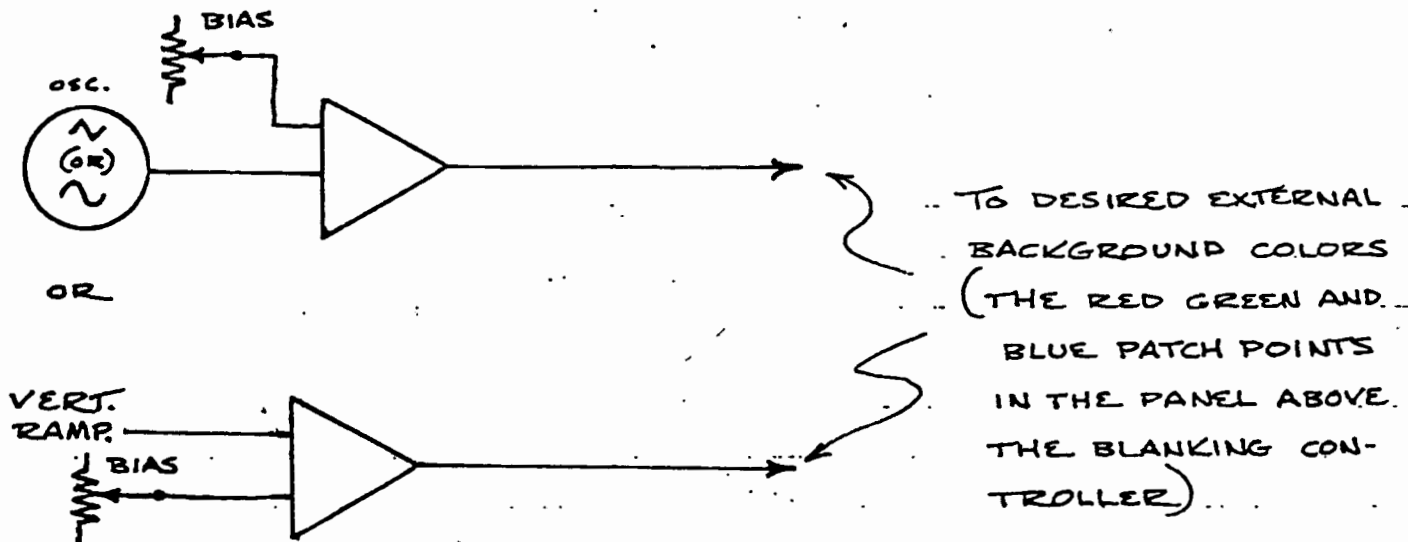


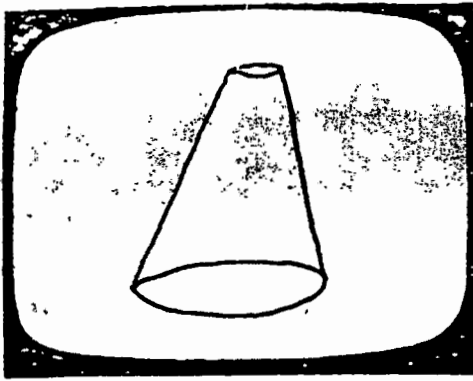
By adding Osc 2 into Osc 3 + changing Depth Control (int a face)
also, 90°

GRADED COLOR BACKGROUNDS



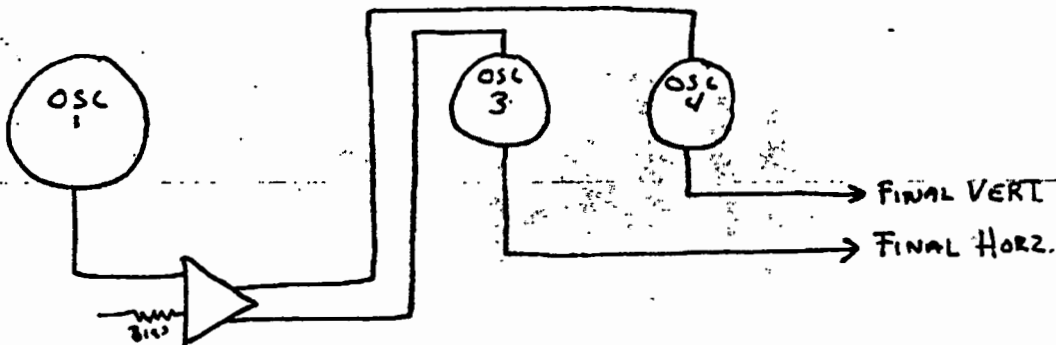
NOTE: COLORIZER "PED.", "LUMINANCE" AND "MIX" WILL AFFECT THIS SETUP (COLOR LEVEL, BLACKS, SATURATION, ETC.)




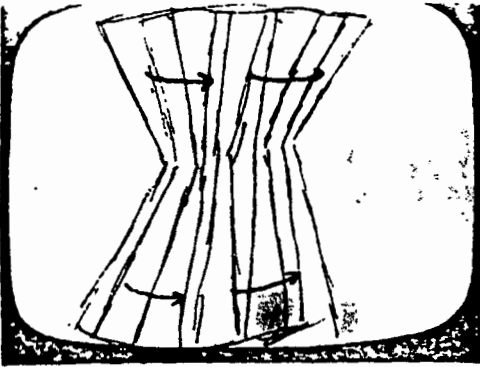


CONE

1. LENGTH TO A LINE
2. BRING TO A Dot (Depth to 0)
3. Sine-Cos pattern
4. Switch to 90°
5. BRING out Depth

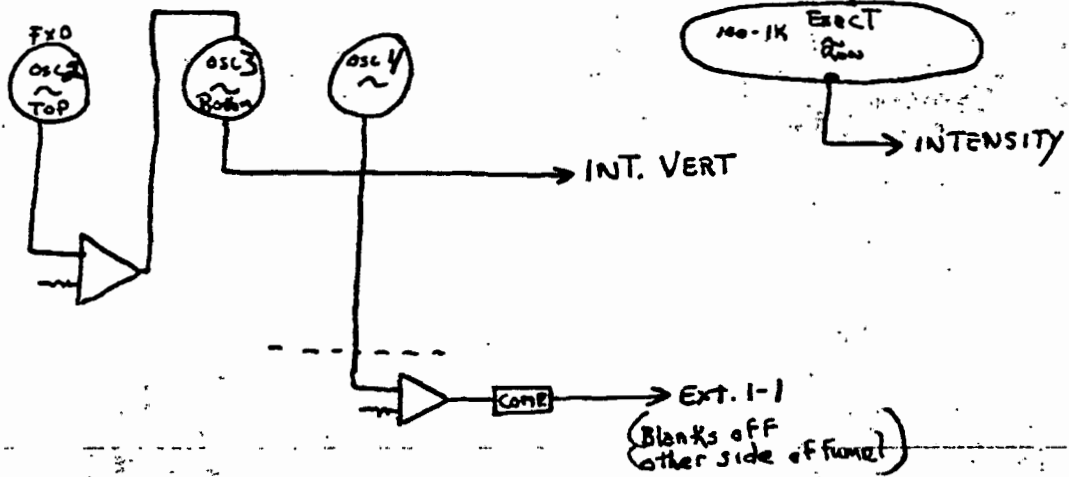


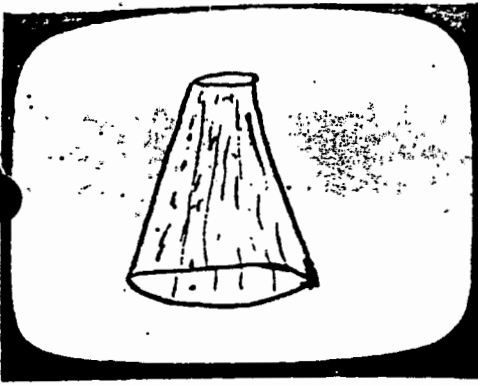
CAN Be moved with Axis (Horz or Vert.)
 Also can Add Exact to Vert for Ripple 
 OR Add BLANKING Feedback



(Hourglass)
Cone @ intensity roll
can be used as Filler

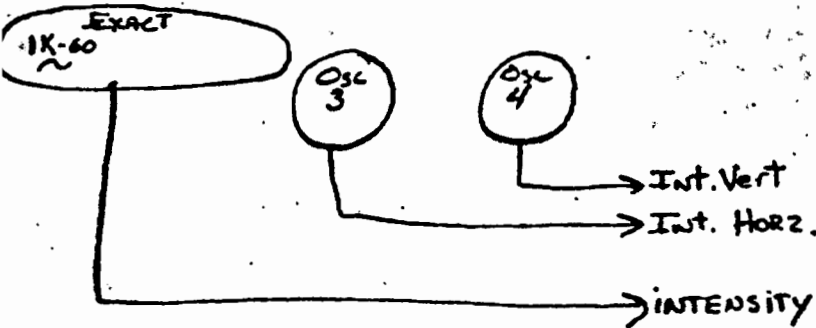
Rotate 90°
length to a line
make in int.

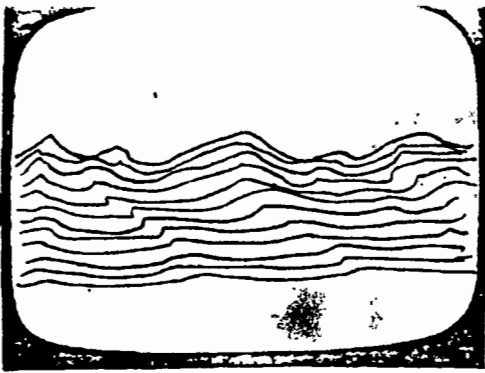




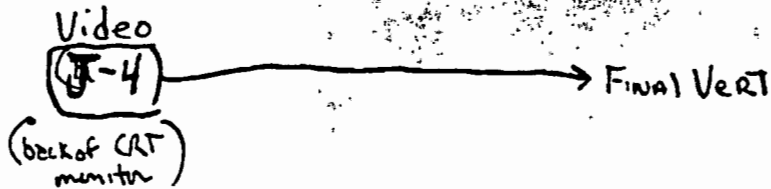
LASER → ^{CONE}
Cone...

- 1) LENGTH TO A LINE
- 2) Make a wheel since Rotating cone will keep it on axis

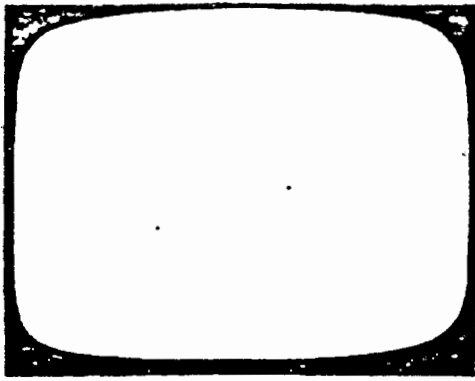




(One step beyond watcher in the woods)
Video into Vert. | Mountain terrain

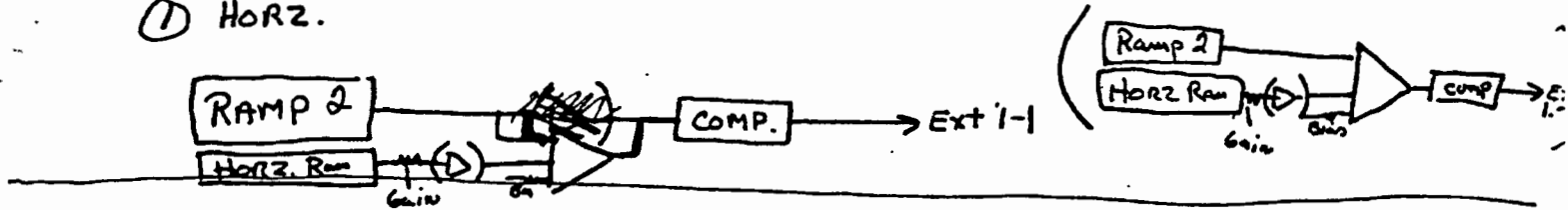


IF video input from ^{Pick-up} camera it could be slit scanned or otherwise affected
OR input could be posterized (ie ^{output} ~~input~~ from ^{studio} camera, VTR or other ^{sequence} ~~sequence~~ _(ie a slit scan)

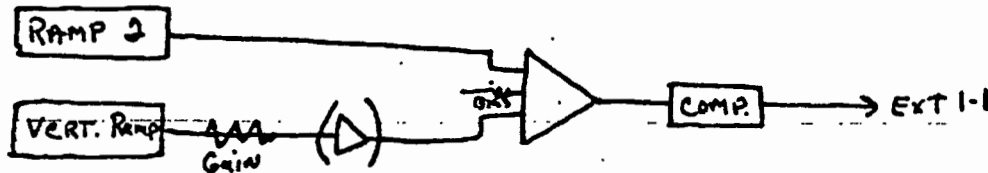


Wipes with BLANKING

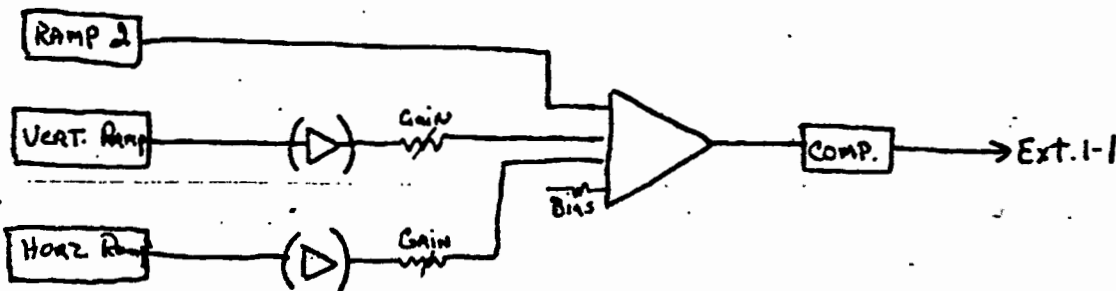
① HORZ.



② VERT.

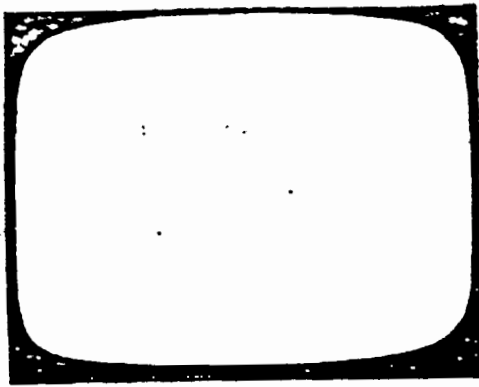


③ DIAGONAL



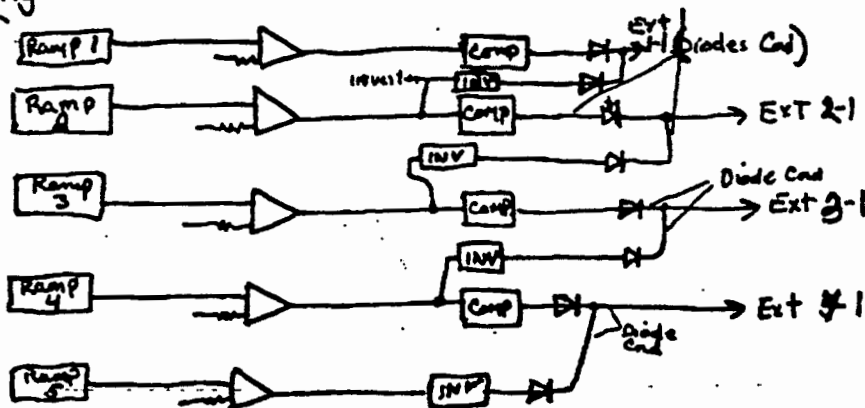
Notes For HORZ. + VERT Wipes
INVERT VERT OR HORZ Ramp
 for opposite Wipe Direction

INVERT Sum Amp out
 OR Comparator (thru Digital INVERT)
 for opposite BLANKING

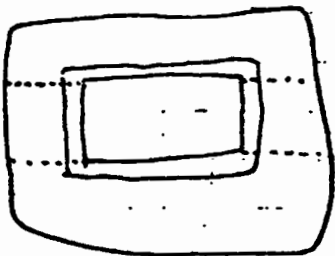
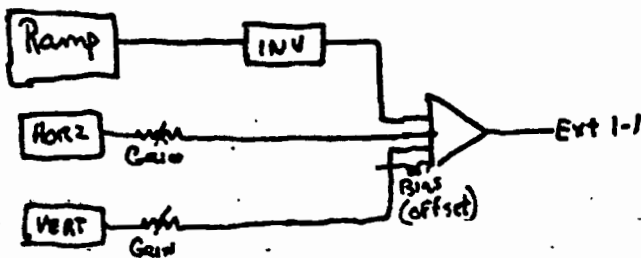


Blanking On and Off different section
using diode patch cord

Separate Blanking P.P.



Blanks on (Ramp 1 - Sec. 1)
Ramp 2 - Blanks - Sec 1. off
turns Sec 2 on
Ramp 3 - Blanks Sec 2 off
turns Sec 3 on
Ramp 4 - Blanks Sec 3 off
turns Sec 4 on
Ramp 5 - Blanks Sec 4 off
all sum amp are offset..



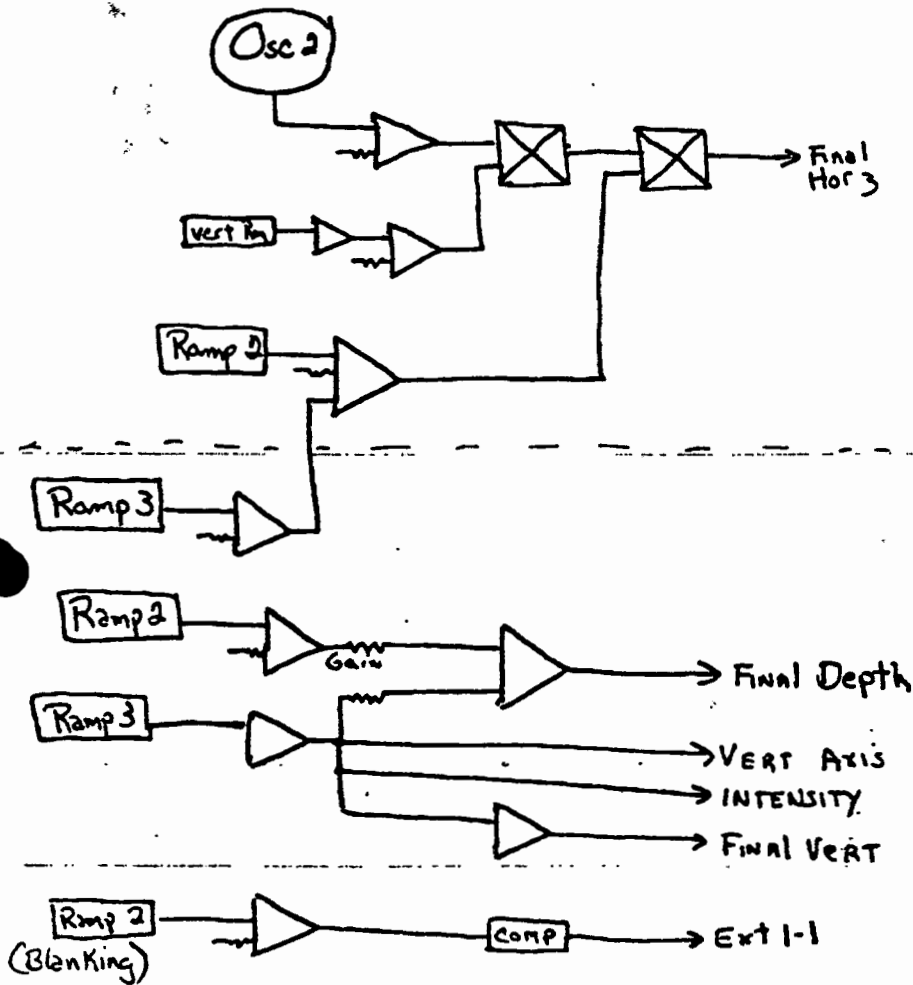
BLANKING OFF RASTER
around RECTANGLE (1 section)

DIVIDE INTO 3 section

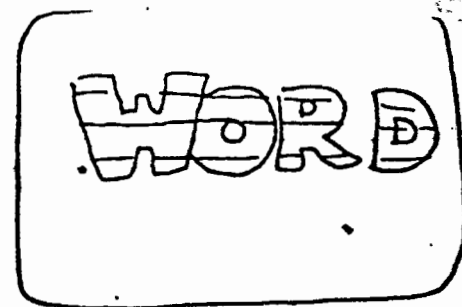
with Horiz + Vert Blanking blank off unwanted
raster



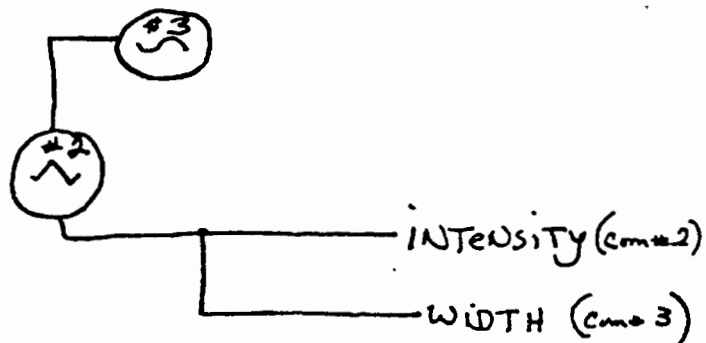
start at
Dot
Grow Big (with stretch)
then snaps to medium size
(all in one move)



Flicker or Lives Thru Word

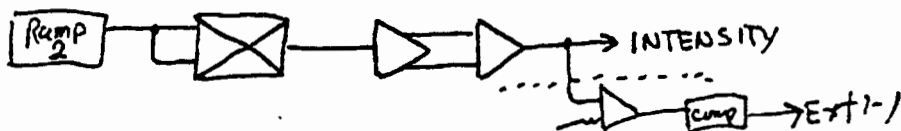
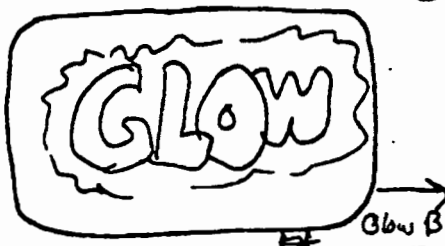


Glow's
see below



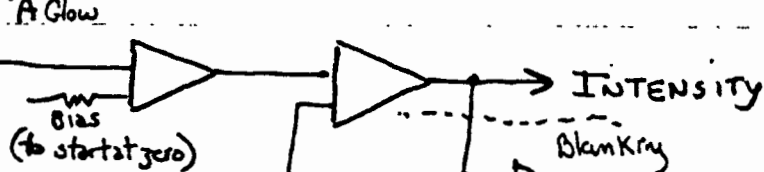
Also adjust with colonizer (level Detectors)
AND overall intensity (scan control)

Glow



if need be double it again. (+ inv) ~~if need be double it again. (+ inv)~~

Ramp 2
trigger intensity on

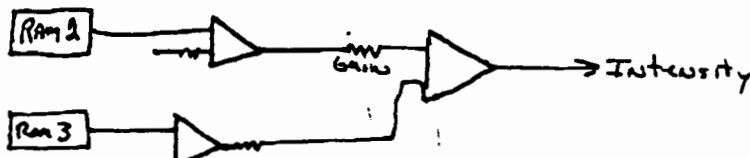


Ramp 3
triggers intensity off

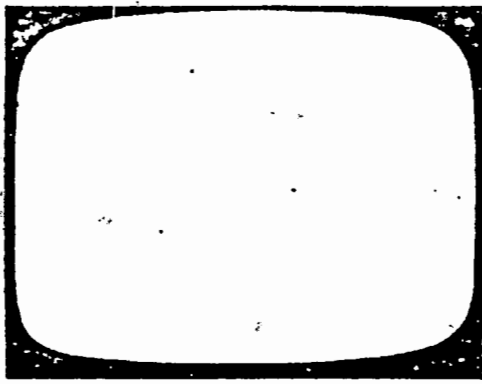


Put tissue paper over CRT
Also put scan cam slightly out of focus

Glow A allows you to
choose Rate on
then Ramp 3 choose Rate off



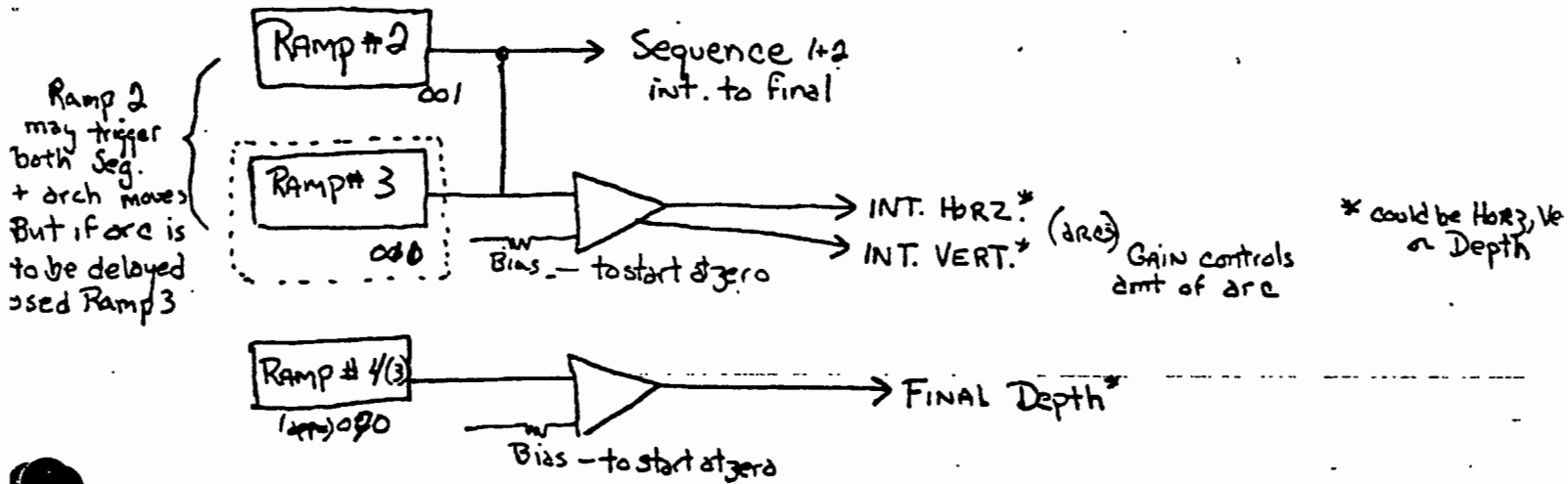
Also:
Glow
ben
wona
(for
BA
Glow



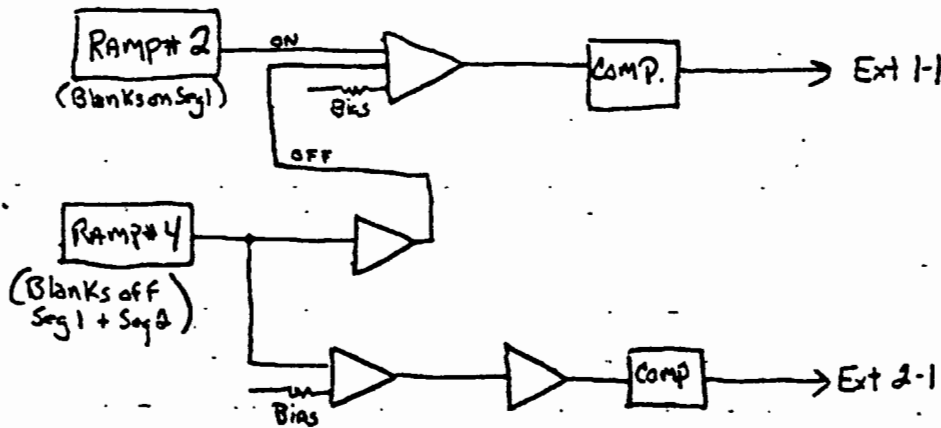
2 words....(2 segments)

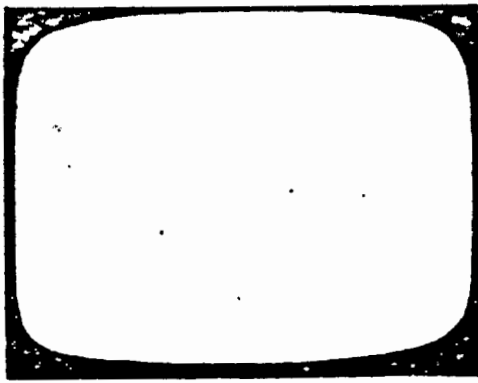
One ~~does~~ comes from a dot @ a horiz arc
One from large @ a vert arc

Both to center... then both to a dot

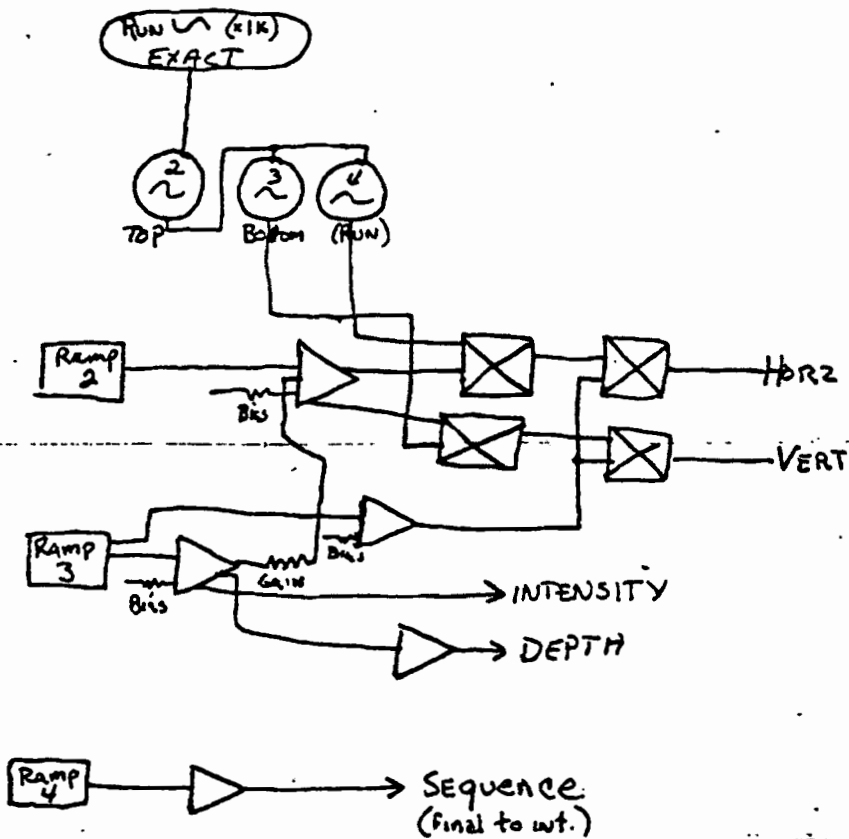


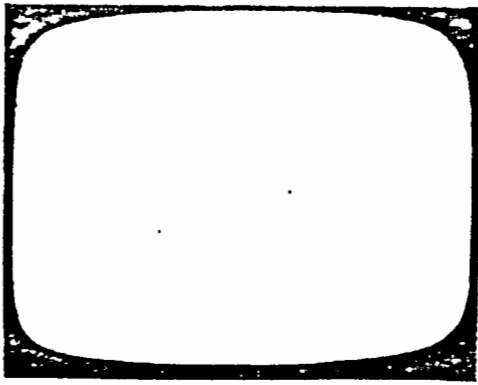
Blanking



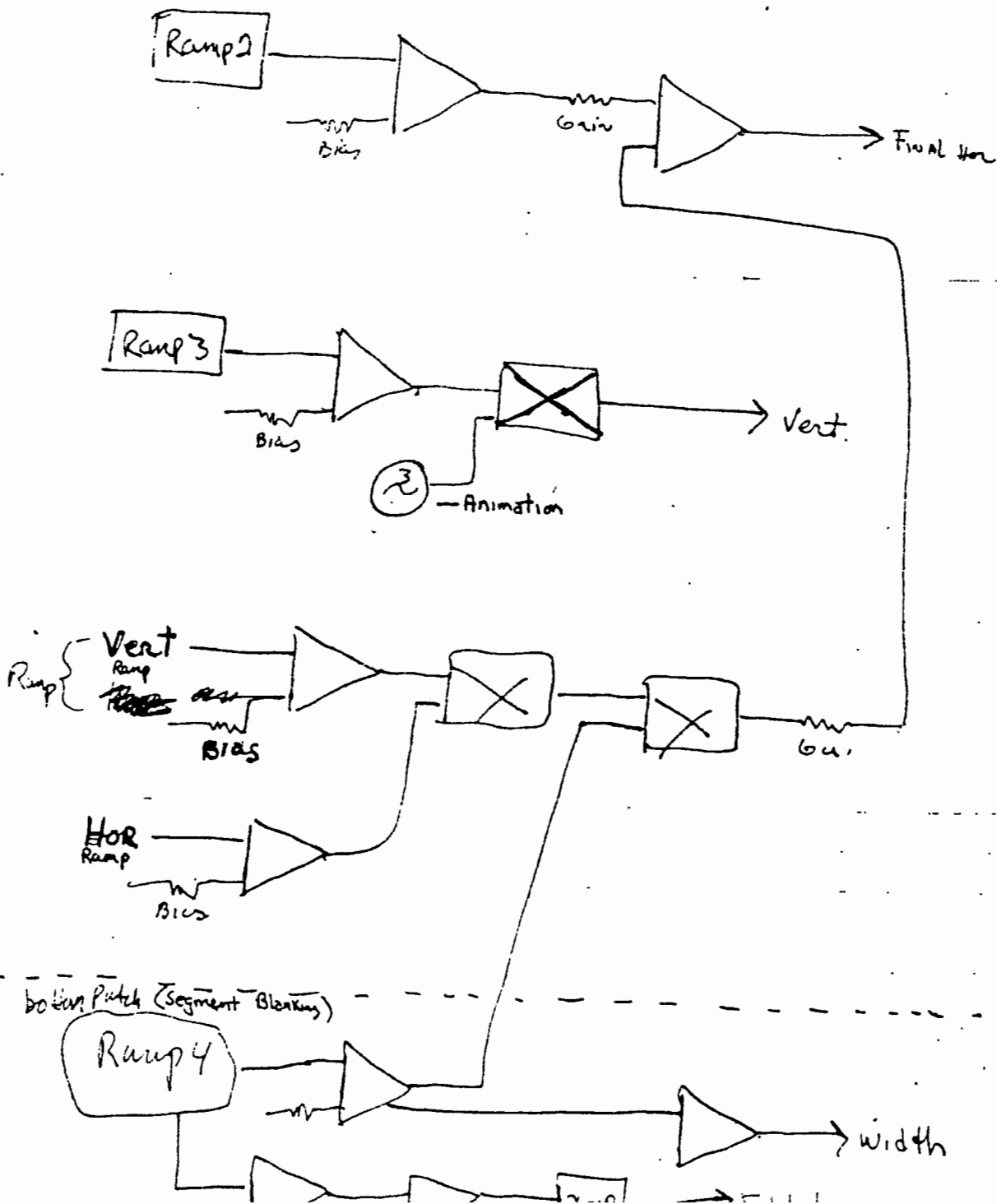


- start at dot
- Animation starts
- Animation zooms out
- Animation Resolves to word
- Word Zooms to a dot



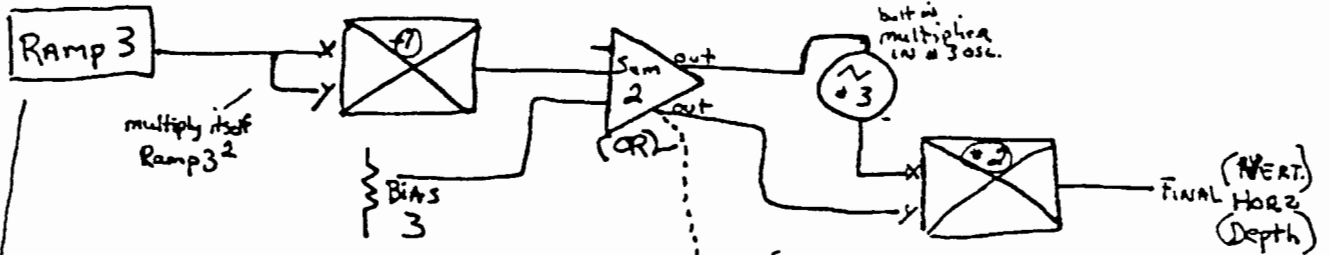
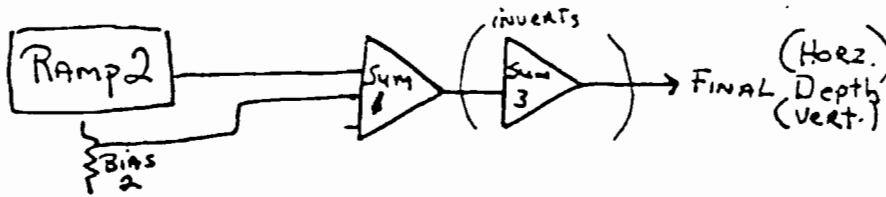


Word in from Side Oscillating
Oscillation Resolves off
Word then folds to a line with perspective



Oscillation of Raster in Ext. Sequence

- (1) Adjust Sequence So Final position
- (2) Build Bias Ramp #2 for movement int to final
O/Bias at final position (det by Scan Control).
For int. position use appropriate pot (comm. change sw).

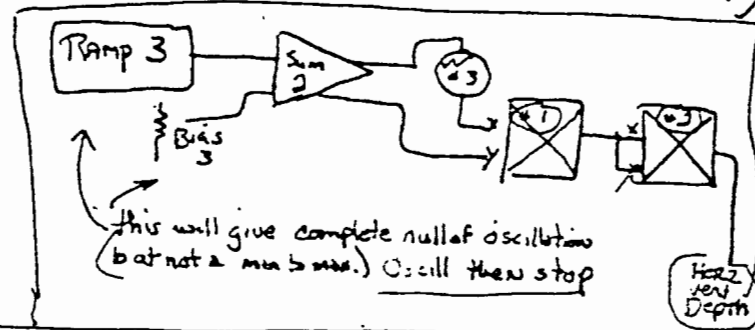


(Ramp 3 depending on start set* will set off oscillation which will go on then off (min-max) again (or by bypassing osc. can make another move + then back again)

Adjustment of this Bias* will null out Osc 3 for final position (or Bypass move)

(Bypassing Osc. So Raster will (int. to final Ramp 2) then Make another move + back to original position)

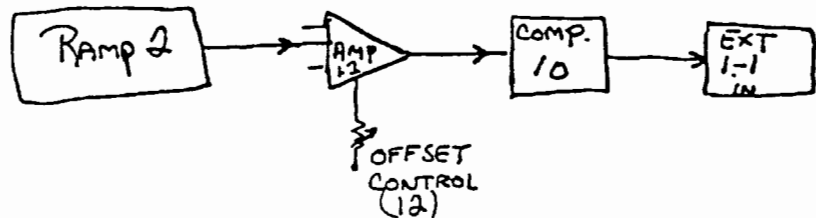
* Can be made to happen during int to final move of Ramp 2 or after it.



this will give complete null of oscillation (but not a min to max.) Oscill then stop

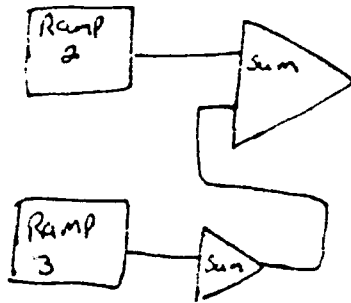
Also for blanking off dott

Patch Panel Seq. Blanking



From final to initial then back to final

Sequence commutator
is the bias (to make
sure in final turn on Horiz
osc. adjust sequence

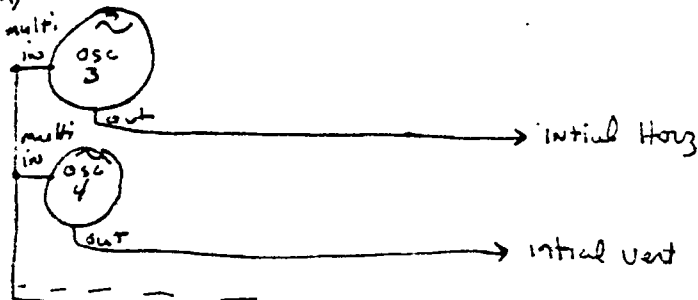


Sequence
(Biased to start
in final go to initial) by Ramp 2

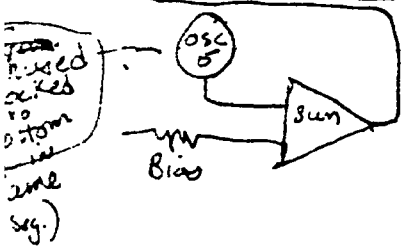
then Ramp 3 sends it from initial to final

also

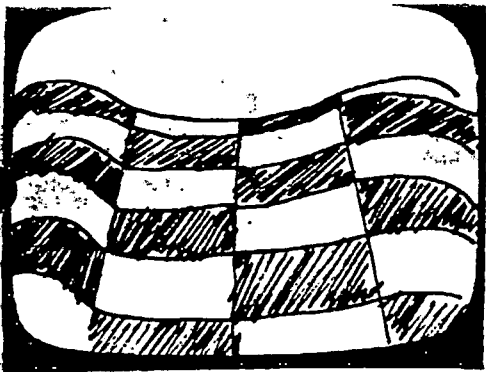
(Animation)



(Basic Sin/Cos Patterns)
see previous notes



The key to scanimate
is learning to engineer
the shape of waves.

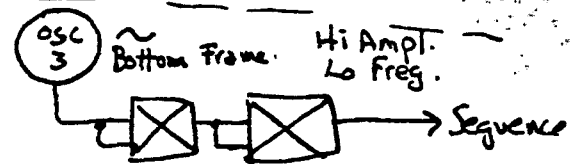


Checkerboard, slitscan like..
Road or mountainous plane.
(OR simulated abstract piano keys)

① (Preferable way)



②



osc 2
Frd
Top

Amp - mid range

will add mountain-like effect...
(could be osc 1)

→ Int. vert.

Also For changing shape
Int. Oscillator

Horiz - (left) Fast Vert. Depth
Frame (Top Frame) Low Freq. D-2 (Frame) Low Freq.

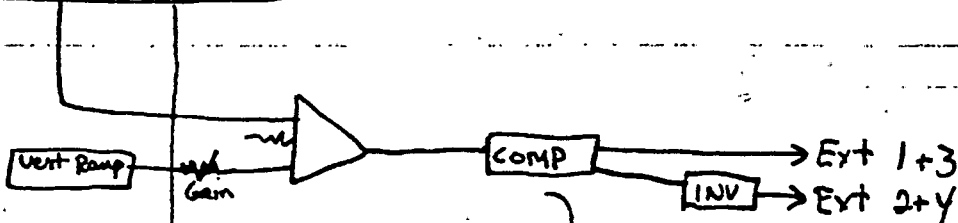
without have flat plane)

Blanking (see lines @ perspective) (For both H+2)

Ext. vert seg.

1 2 3 4
⊖ ⊖ ⊖ ⊖

Exact
IK Mode ~ Ramp Mode Ramp
.7 Sweep Trig Time
Ampl. 1msec
1428 40'clock
Bizz off out TR11111



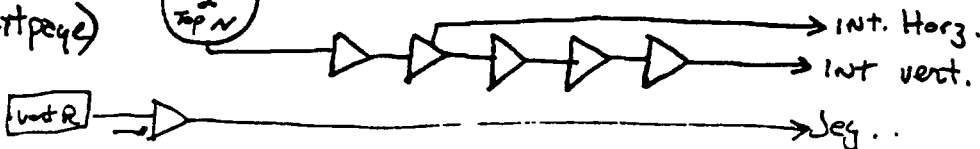
will control
grouping
of lines...

Vert Ramp

Checkered effect

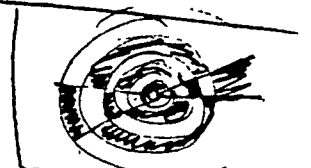
Modified.
(see next page)

osc 2
Top N

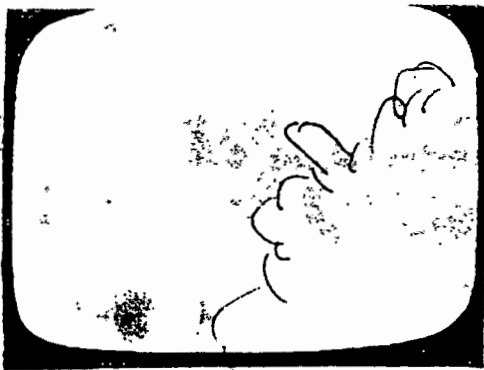


same Blanking

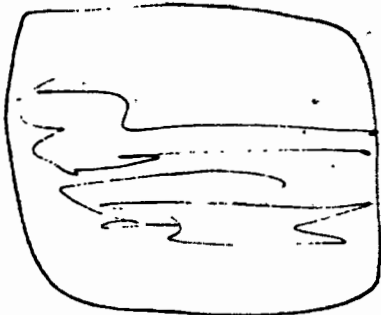
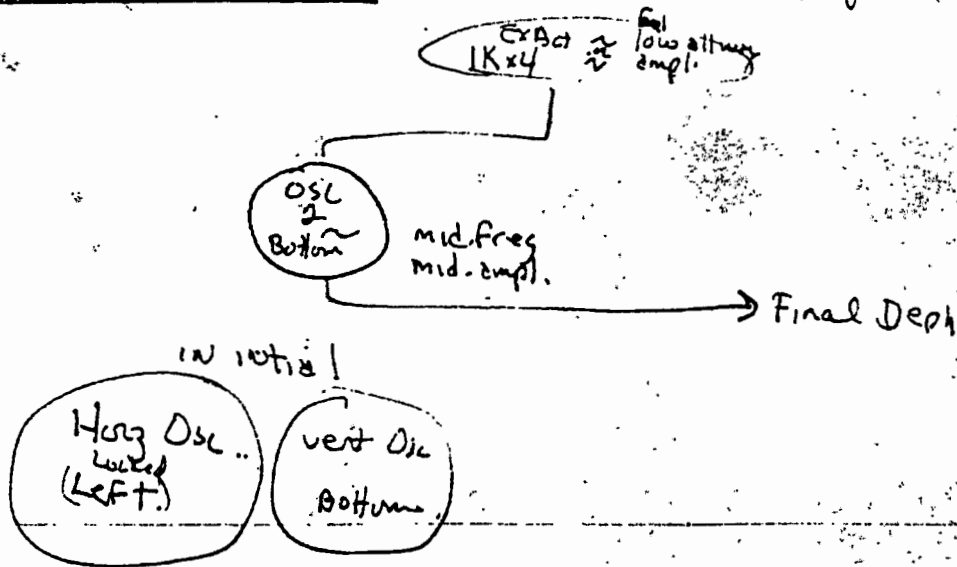
Note Further modified
bring on Int. Osc. Vert.
linked to top for line



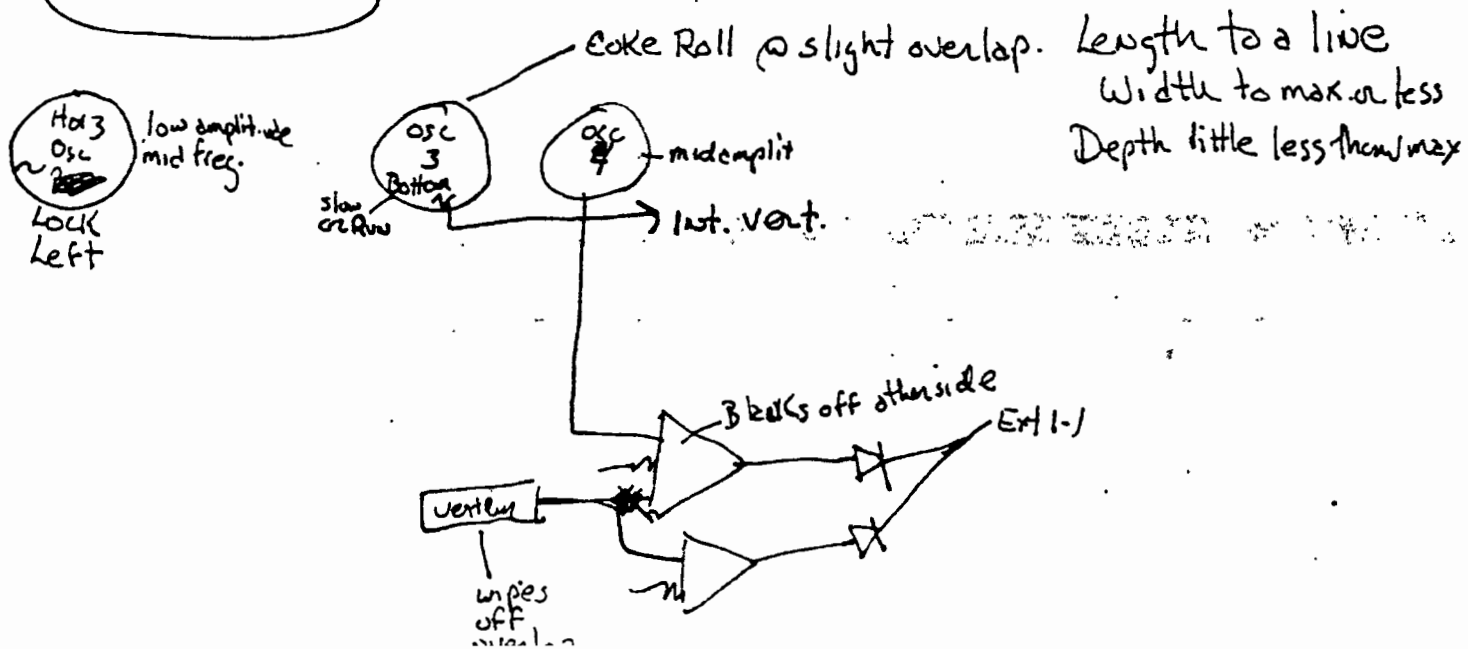
Circular Slit Scan
(Disc or Ripples in Puddles)

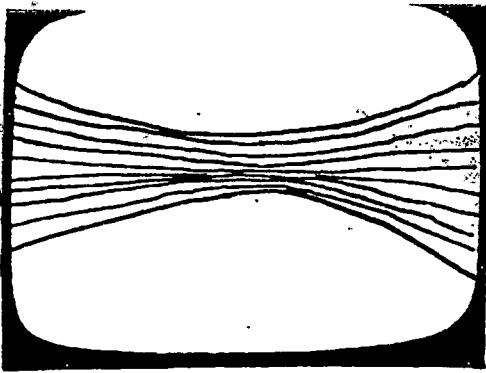


Cloud like Abstract
 (see Zootu Tape #1 UTR I 1:07-1:19)
 in initial
 CRT - soft focus — Depth to add
 move with ramp
 into final horz + vert
 Adjust Osc.



Seq to int. Clouds (constantly Moving)
 (Rotate 90° or a few °) CRT slightly out of focus
 on light box pieces of paper towel small





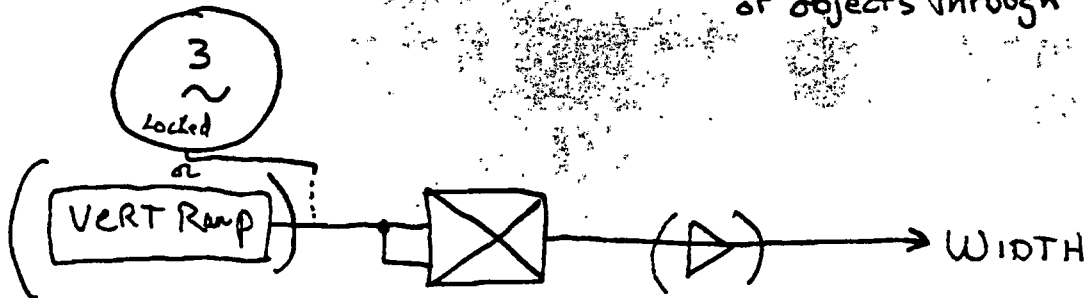
RASTER Distortion
(ie. NBC Olympic Close)

(ART mounted 90°)

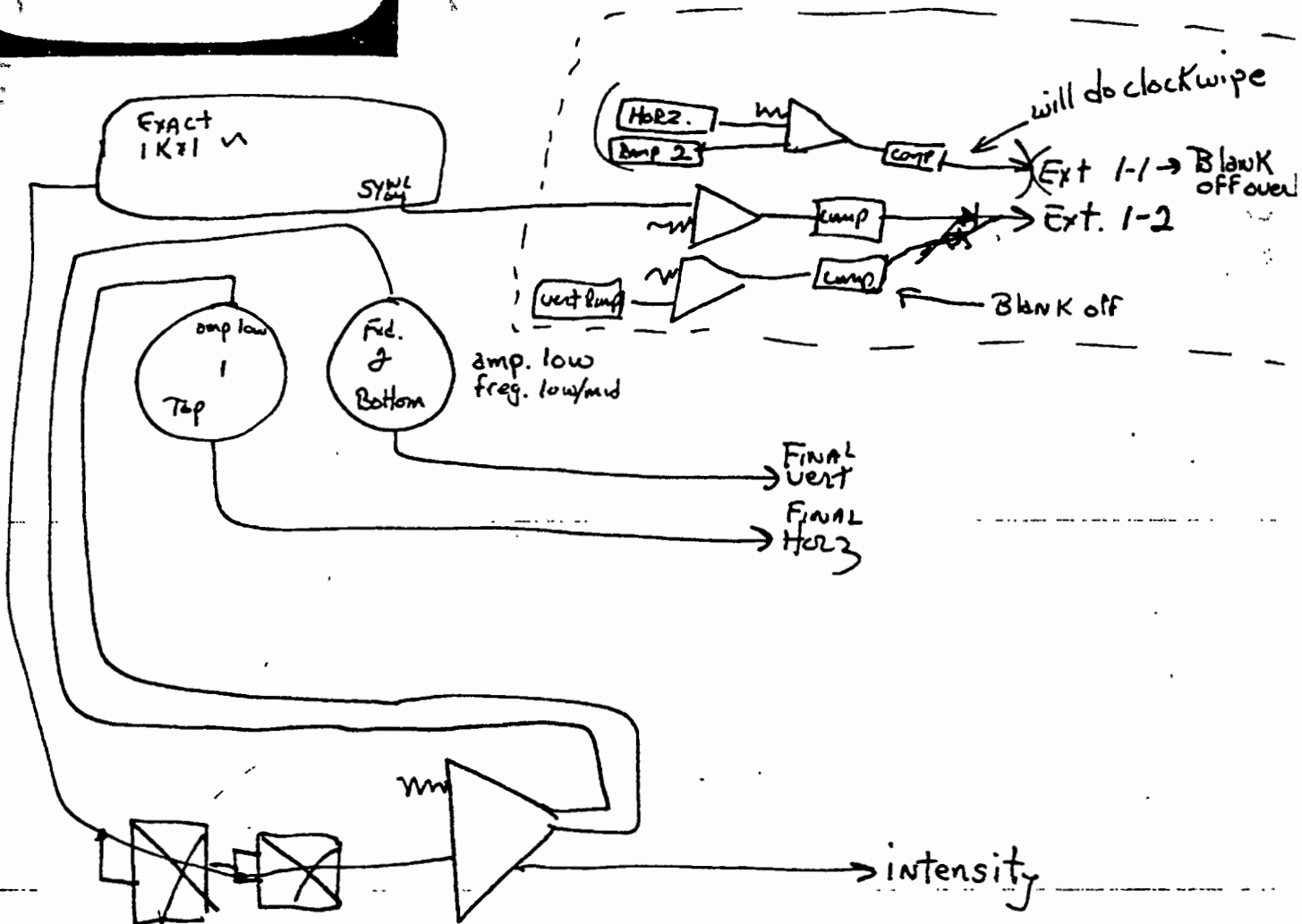
- Rotate 90° -

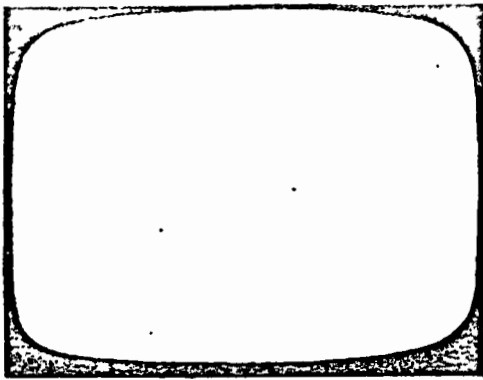
Axis + ^(of 3)freq. control position + 4

(Posterized will allow movement of objects through)

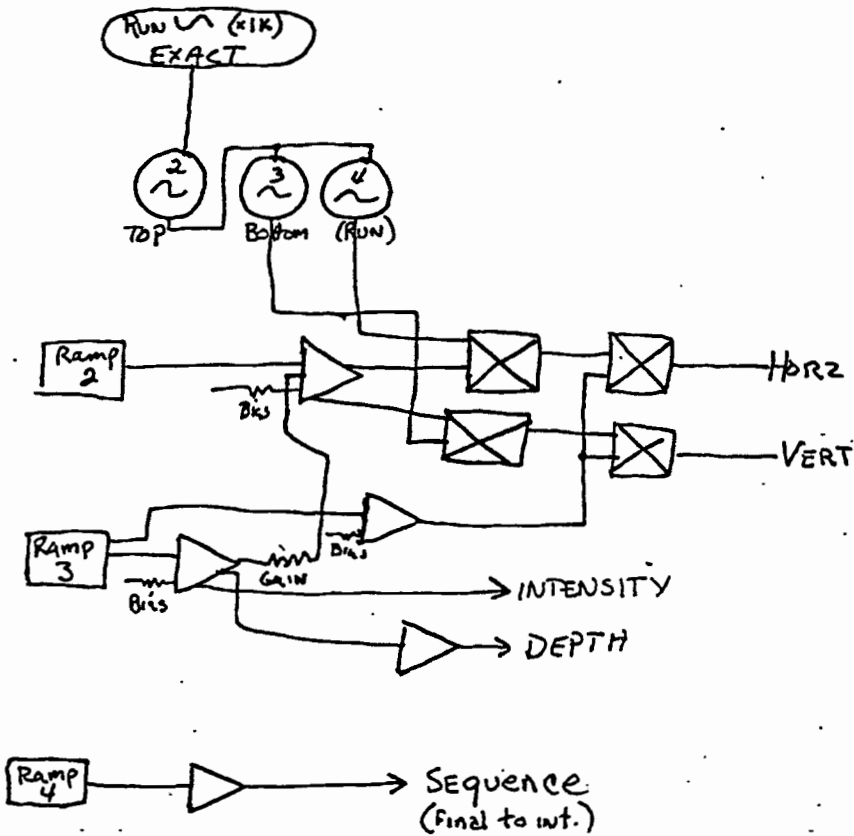


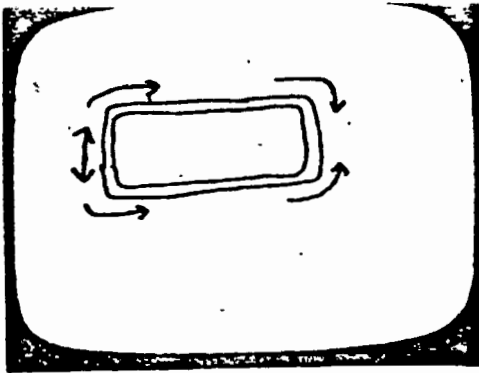
make highfreq sin cosine @osc 1+2
add cubed EXACT





- start at dot
- Animation starts
- Animation zooms out
- Animation Resolves to word
- Word zooms to a dot





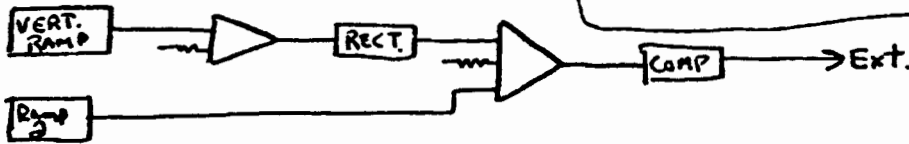
Blowing Wipes (Special) (2ways)

Blanks on wipes
on vertical both ways (R-2)

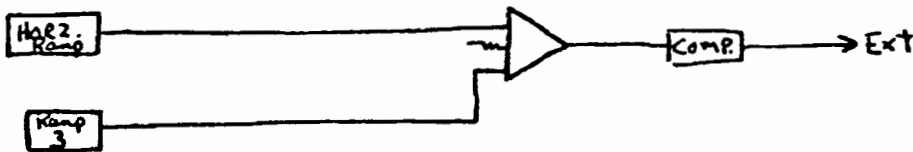
then Horz (R-3)

then down vertically both ways (R-4)

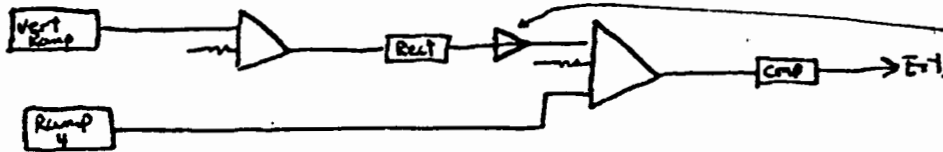
(Can Be used with special sparkle move)
see 1 sparkle into 2
Special Animation



Note: 1st Sum Amp @ bit
control offset
2nd Sum Amp @ bit
control zero point

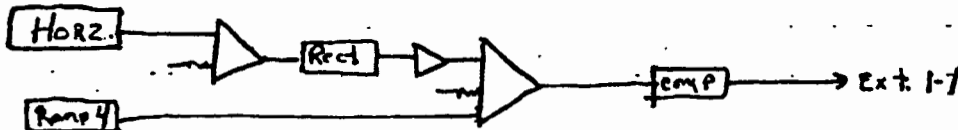
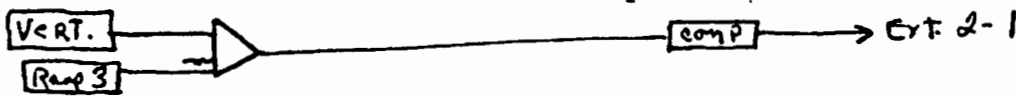
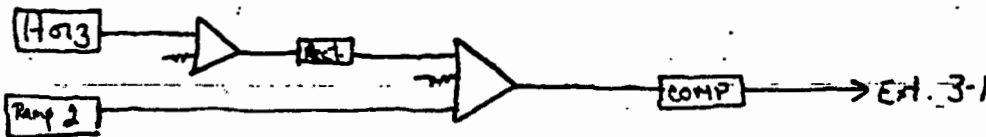


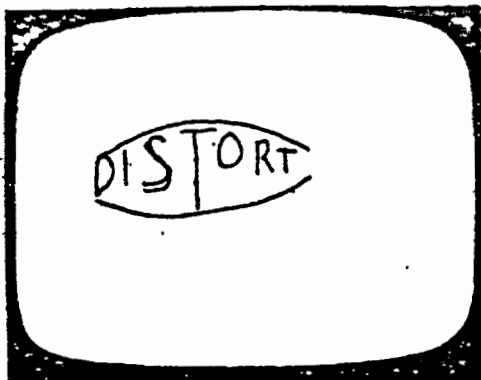
Also make artwork
small in Raster
(e. Do Not Fill Screen)
with it



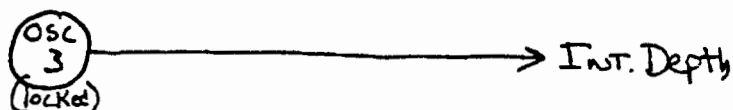
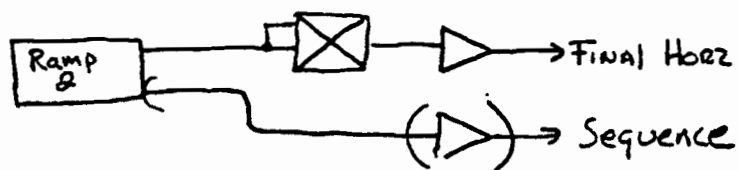
Needs to be inverted
somewhere along line

(B)

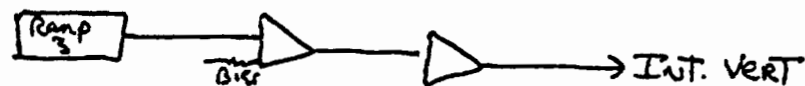
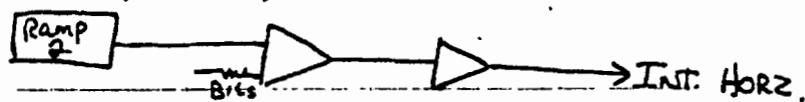


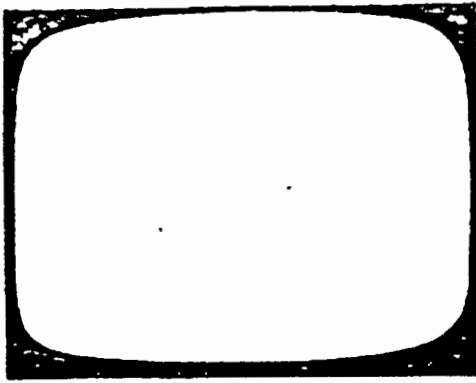


Word starts normal
then distorts
then drops down
(or other)

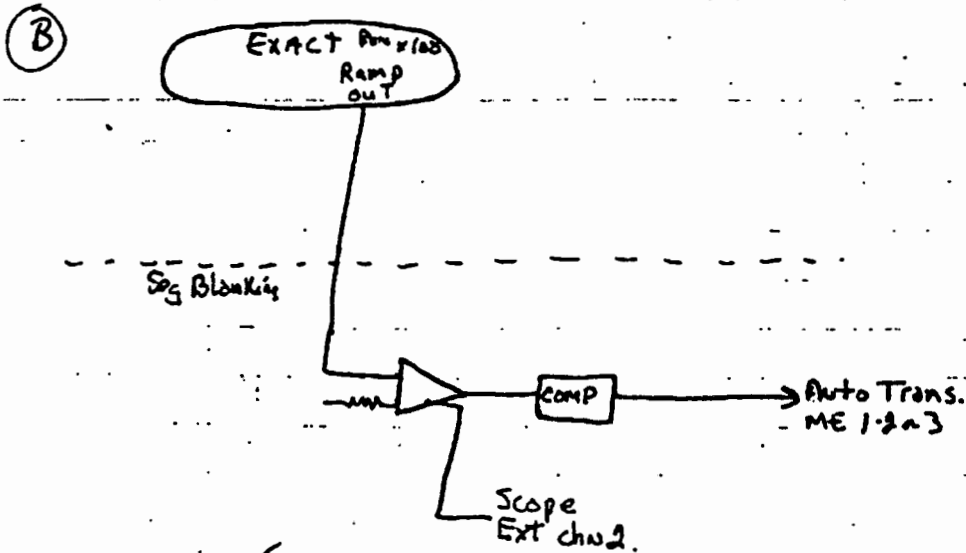
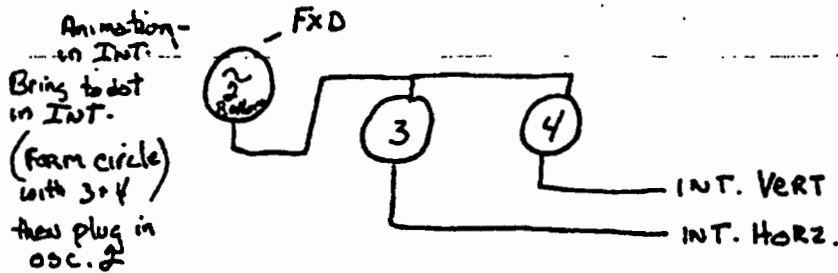
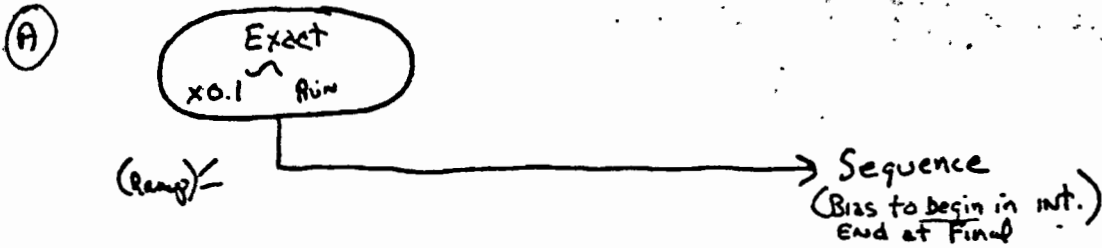


(Segment Blanking Patch Panel)

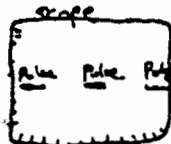


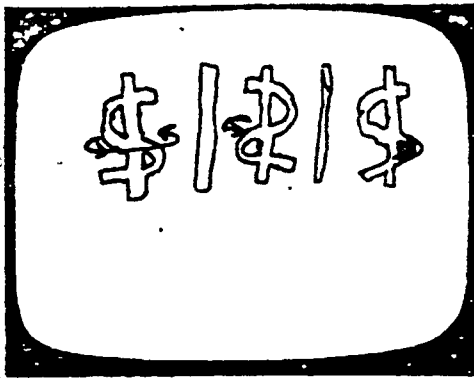


- (A) Using Exact as a Ramp
to Repeat Int - Final to Int to Final
(a Animate - Resolve - Animate - Resolve - Animate -)
- OR (B) Exact to trigger Auto Transition
Repeatedly



Low scope set pulses
so they are small and fairly slow



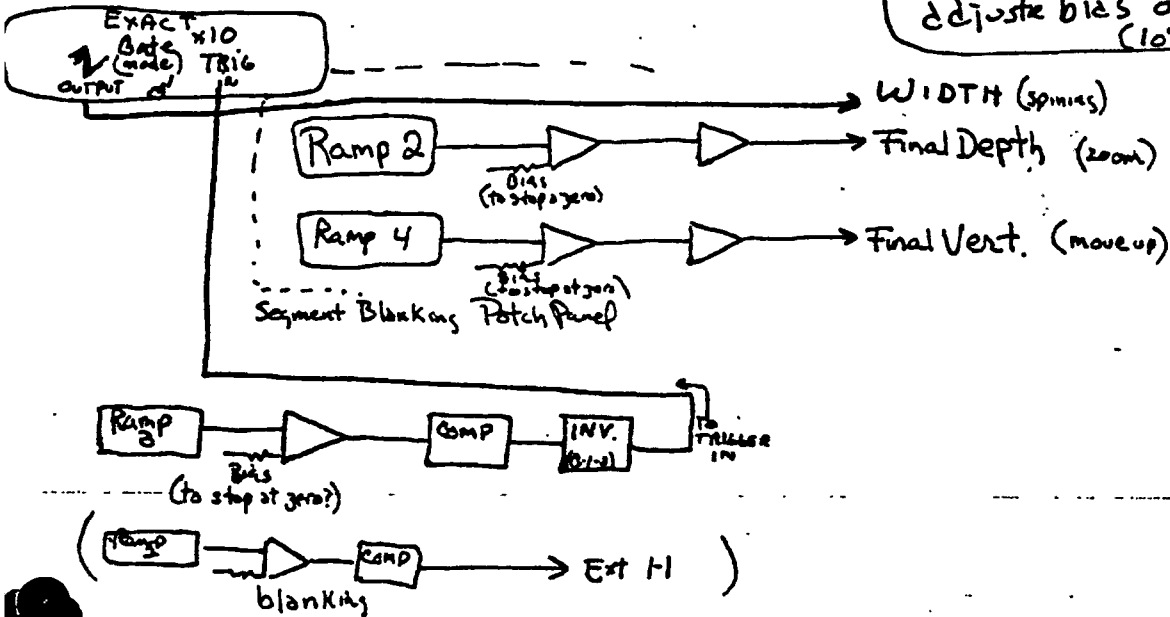


TRIGGERING EXACT

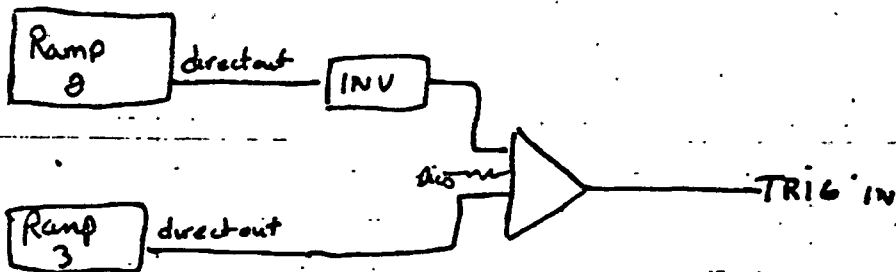
Word or Symbol Spining widthwise..
zooms up stops spining
then moves up....

Start with WIDTH to a Line |
adjust bias on exact
(lock position also)

IF possible should
have maximum and
of width gain..
so bring Depth
up full... bring
down length...
control width is
exact gain pot
or when unfolding
from a line

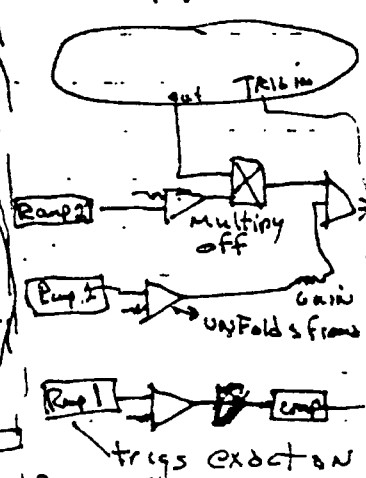
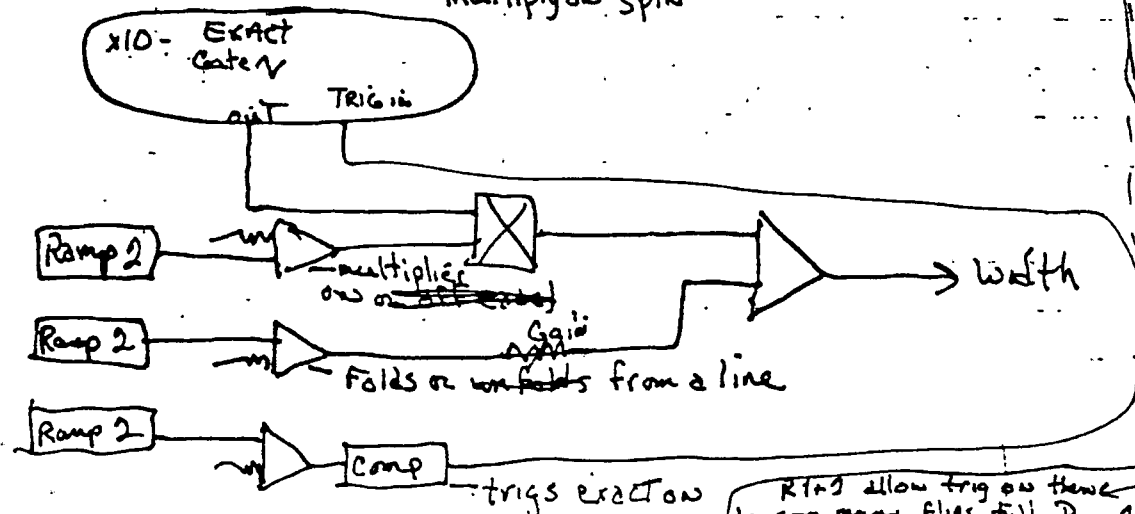


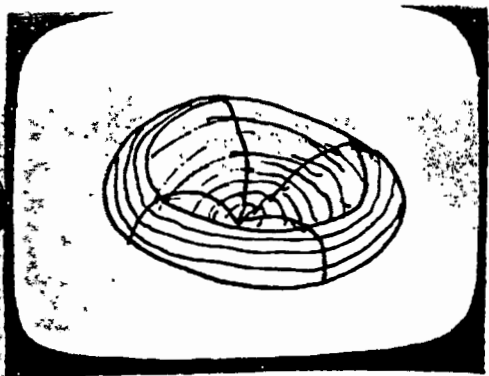
another example trigger on ... trigger off (Ramp 2 starts trig
Ramp 3 stops)



multiply on spin

multiply off



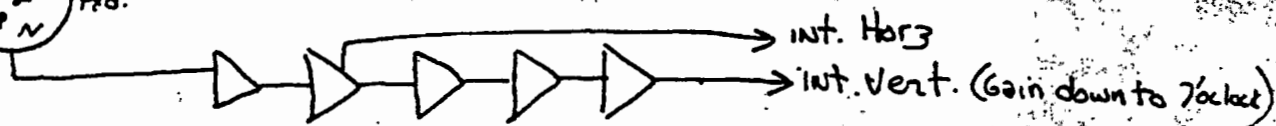
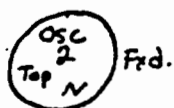
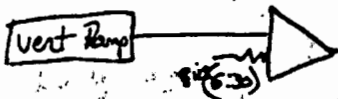


Bowl/Tire (ELO)

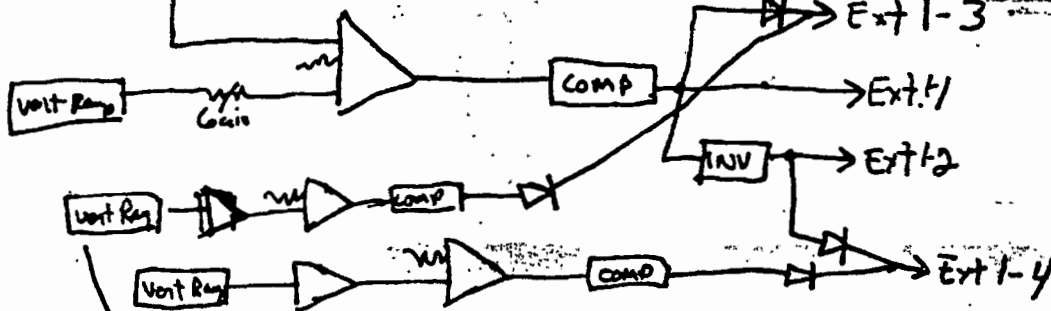
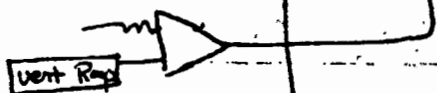
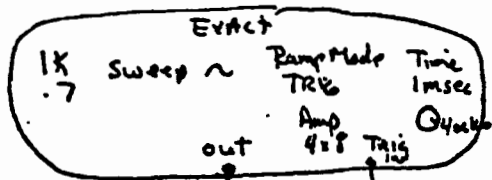
Object. (see checkerboard slitscan modified #2)

To A Dot...

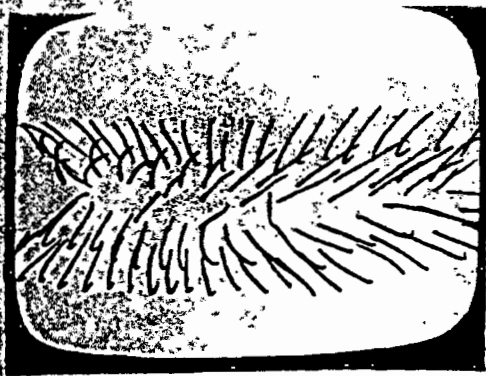
- 1.) Vert to Sequence.
- 2.) make circular (as close as possible)
- 3.) Add Vert Int Osc. lock to Top Low Amp. Low Freq.
- 4.) Adjustment of int Vert + Horiz positioning critical.



Blanking:

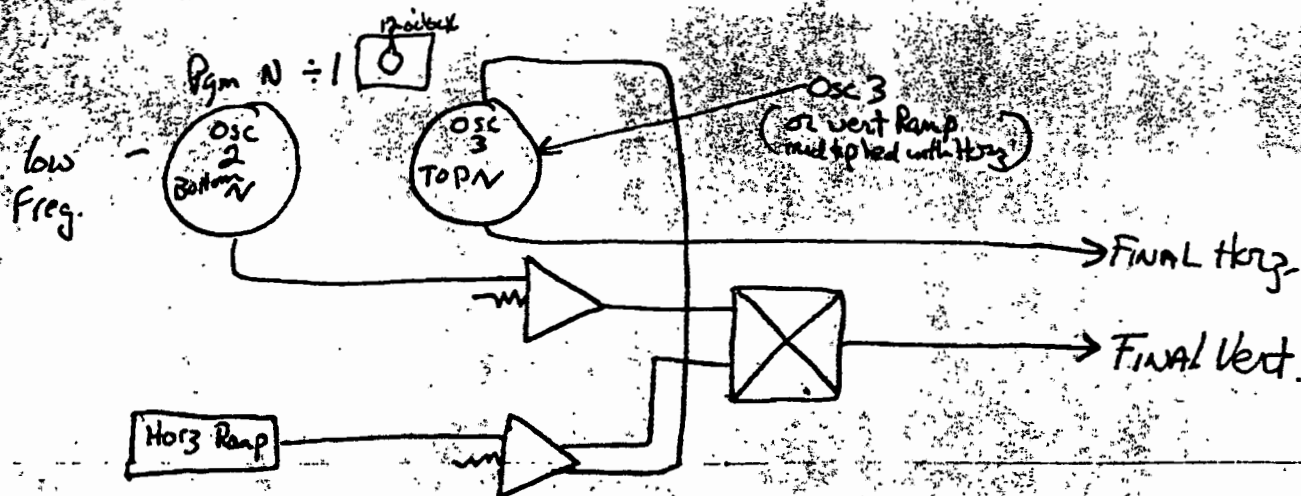


will allow blanking off of overlap in these segments



Porcupine Abstract

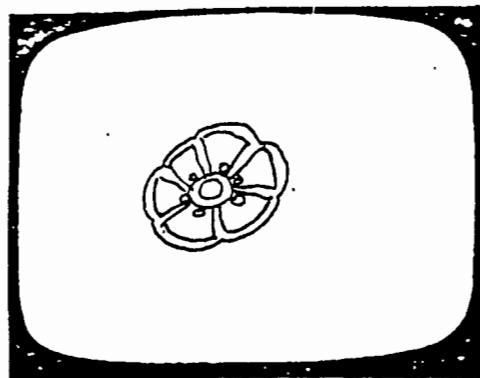
Osc 2 control amt of Hz3.
hnes vertically



Seg. 1-1  ENABLE

Also other wipe variation
ie

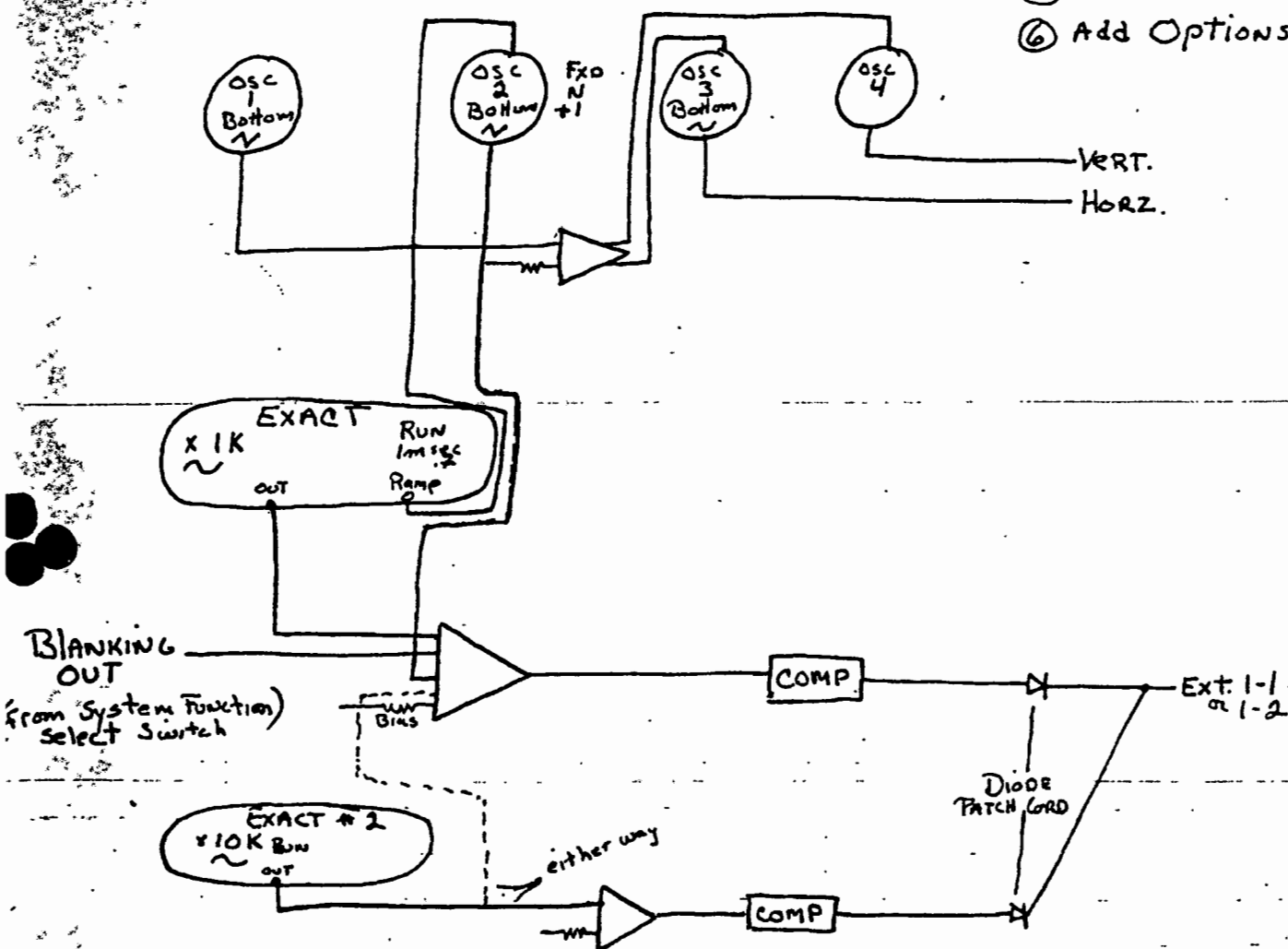




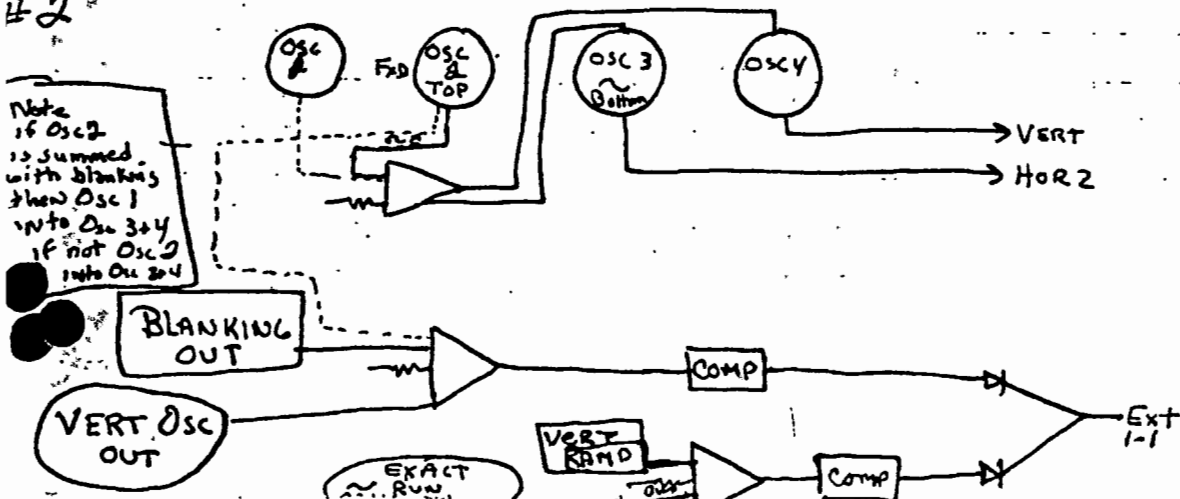
MANDALA/Kilidoscope (two types)
Also MAKES CONES + TUBES

- ① BRING LENGTH TO A LINE
- ② Depth To a Dot (to start)
- ③ Sine Cosine Pattern
- ④ Add Hi Freq Osc (#1)

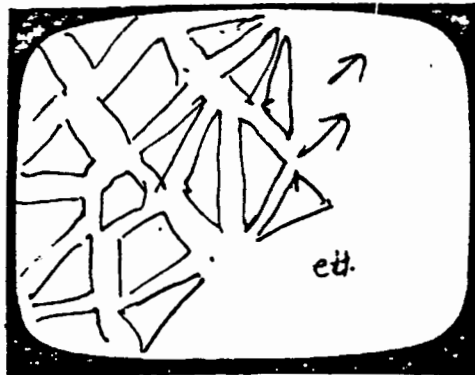
- ⑤ Feedback Blanking
- ⑥ Add Options



#2



CREATES Abstract which can be used as background or as filler...

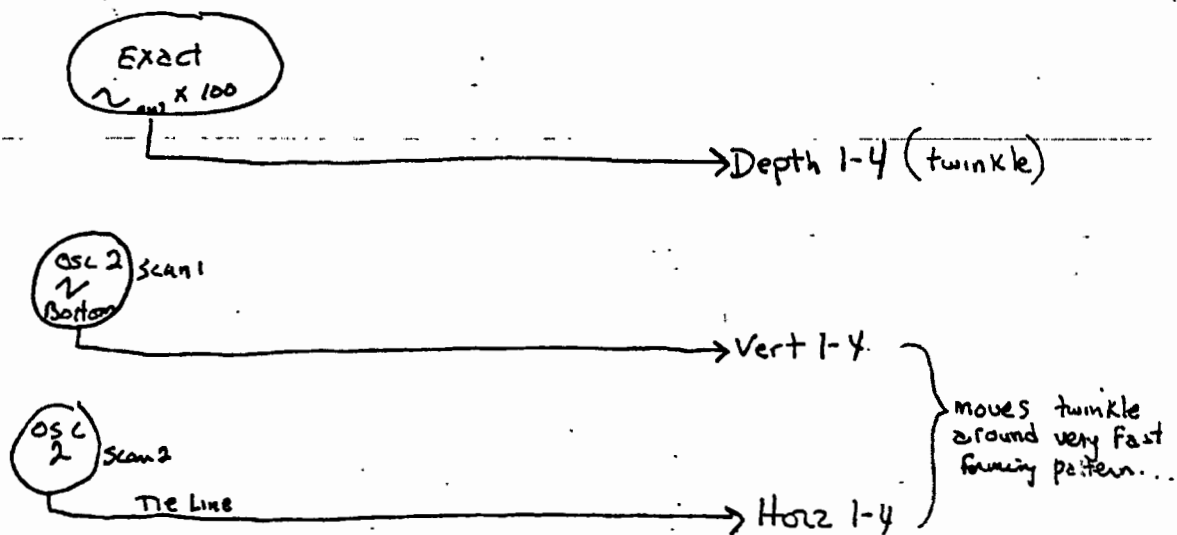


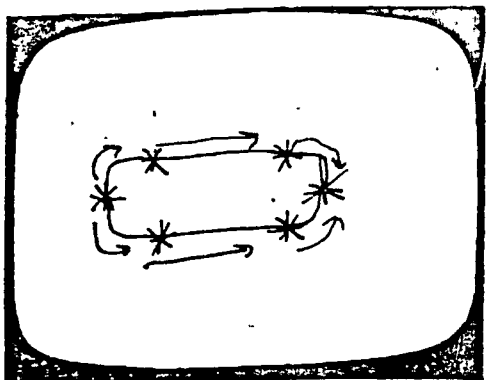
Abstract Pattern (for filler use)
ie Hersey's chocolate

(Bring Scan Cam in close + out of focus)

~~Rotation Dot to Find~~

Break into 4 sections
Rotate... to a dot
Form a star twinkle





Sparkle (twinkle) 2 From 1

- 1.) Build Sparkle with Osc 3
2. Exact: square wave at Hifreq gives illusion of 2 sparkles from 1
(see special blanking wipe)
Blanking section

Square Wave
Hi Freq.

Osc 3 (sparkle)

Exact

Final Depth
(Sec 1-4)

Ramp 2

Bias

Final Vert
(Sec 1-4)

Ramp 3

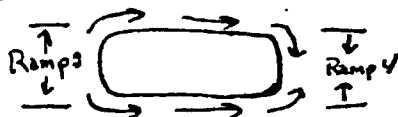
Bias

Final Horiz
(Sec 1-4)

Ramp 4

Bias

Ramp 2 multiplies on Exact
(giving verticle move appearance)
Ramp 3 moves them Horiz.
Ramp 4 multiplies off Exact
(giving verticle downward appearance)



Blanking

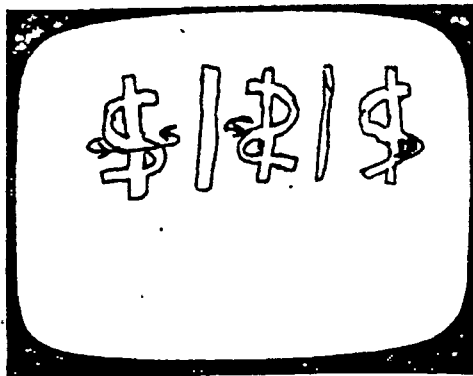
Ramp 2

COMP

Ramp 4

COMP

Ev+1-1

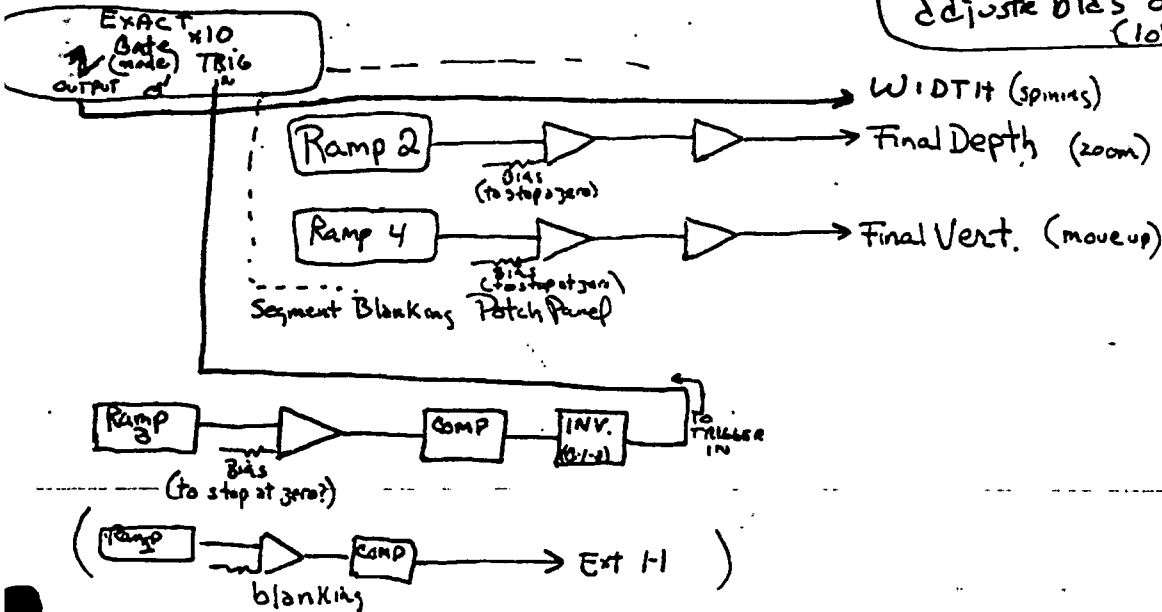


TRIGGERING EXACT

Word or Symbol Spining widthwise..
zooms up stops spining
then moves up....

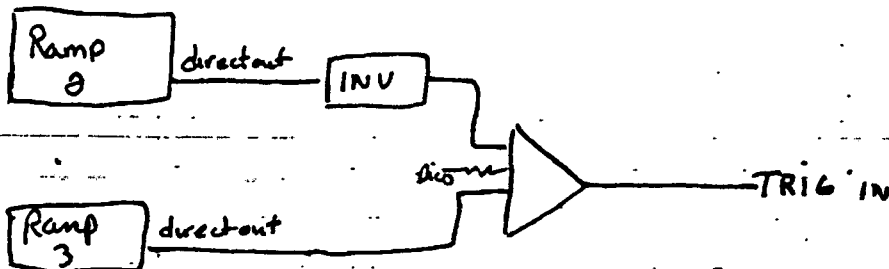
Start with width to a line |
adjuste bias on exact
(lock position also)

If possible should
have maximum amt.
of width gain...
so bring Depth
up full... bring
down length...
control width w/
exact gain pot
or when unfolding
from a line

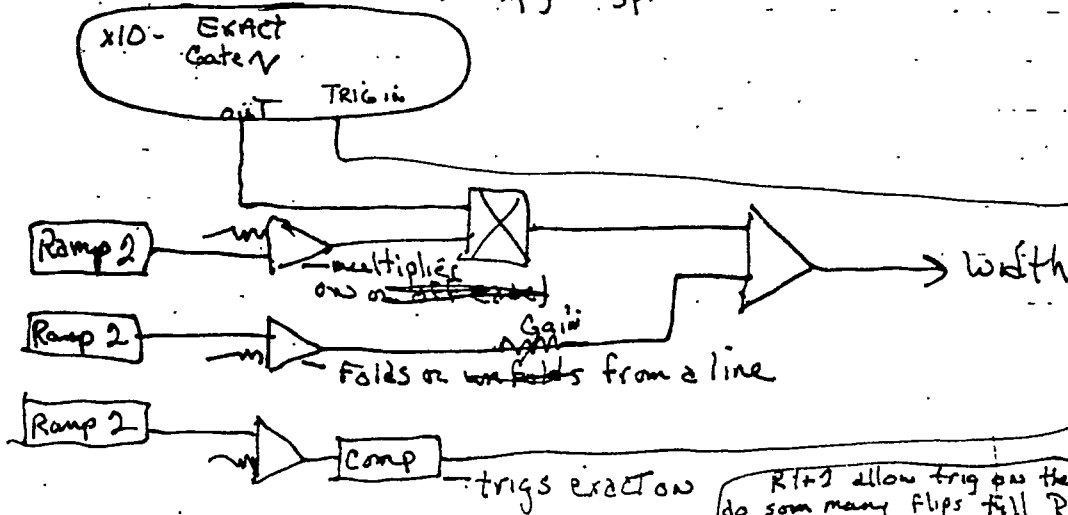


another example trigger on ... trigger off

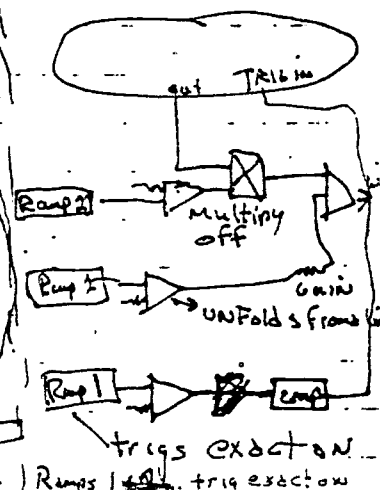
(Ramp 2 starts trig
Ramp 3 stops)



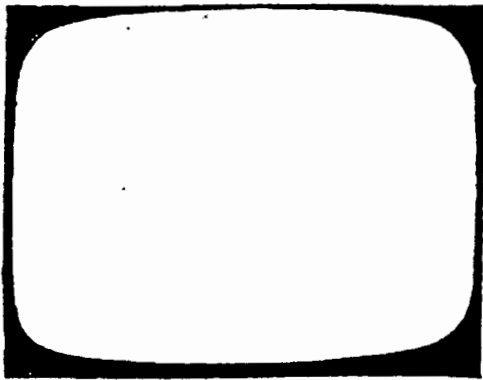
multiply on spin



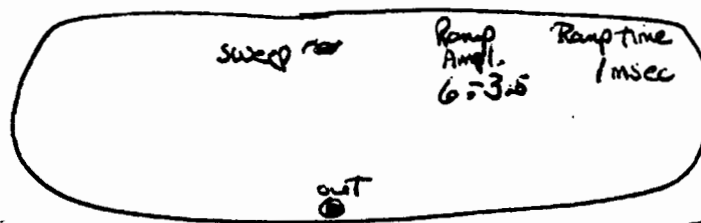
multiply off



Ramp 2 allow trig on these
do some many flips till Ramp 2 | Ramps 1... trig exact on



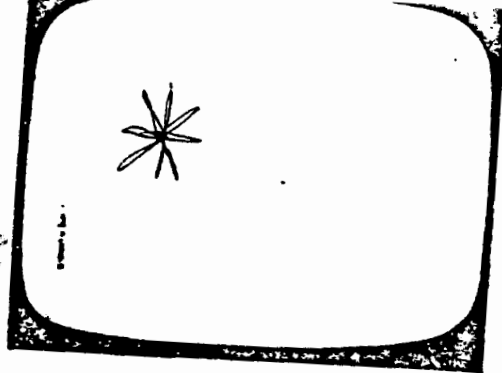
Sweeping Exact



(E) Colorizer

Exact to sweep

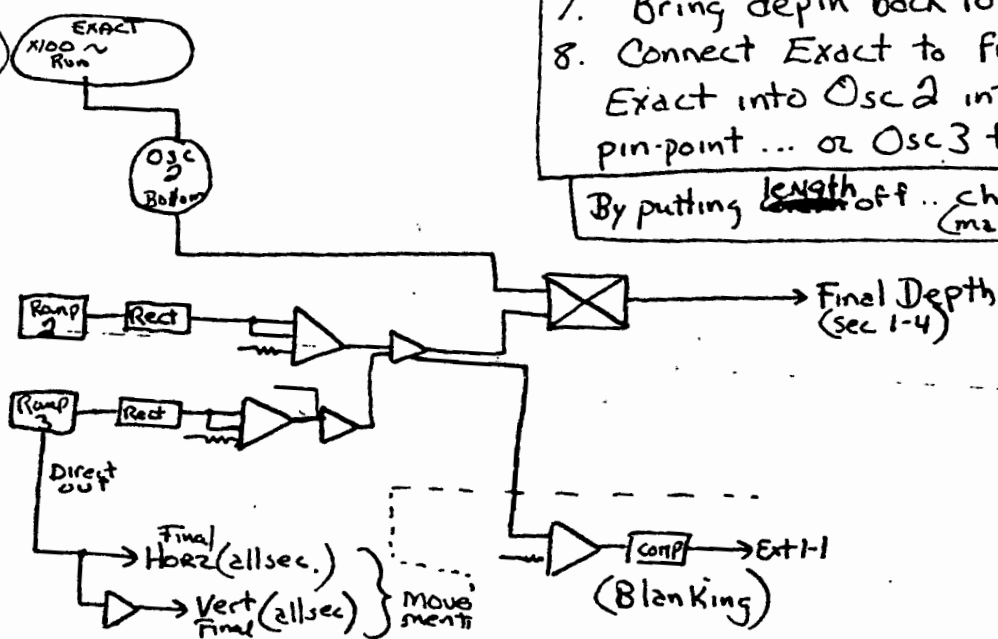
Sweep controlled by Ramp generator (internally)

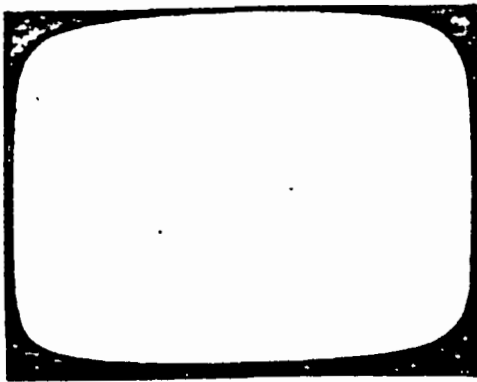


Sparkles r/or Twinkles

1. Divide into 4 sections
2. Fold all to a line (length)
3. Rotate for proper angles
4. Bring depth to a dot
5. Position all dots in center with Final Horz + Vert
6. Bring depth up, rearrange lines with Axis
7. Bring depth back to a dot, set bias ramp
8. Connect Exact to final depth or Exact into Osc 2 into final depth (make pin-point ... or Osc 3 to final depth)

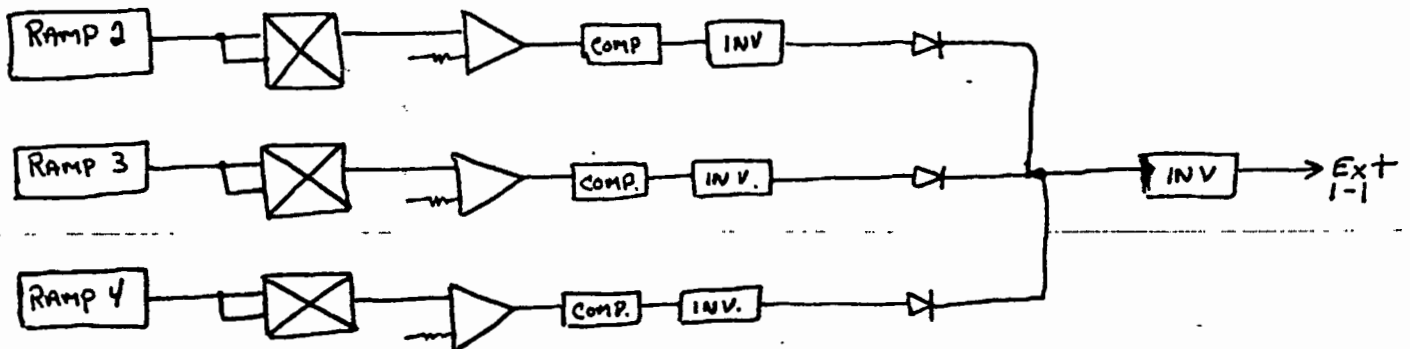
By putting ~~length~~ off .. changes twinkle (makes more points)



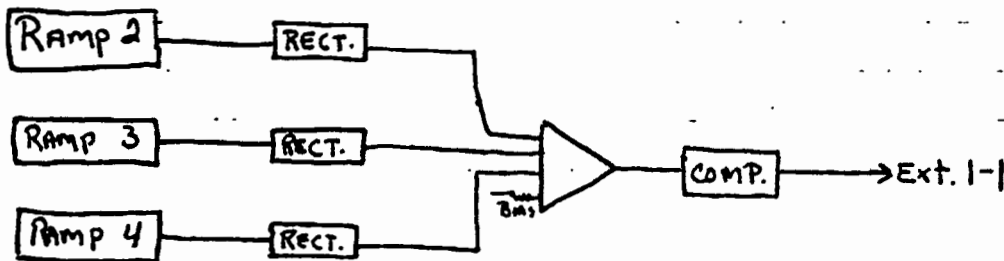
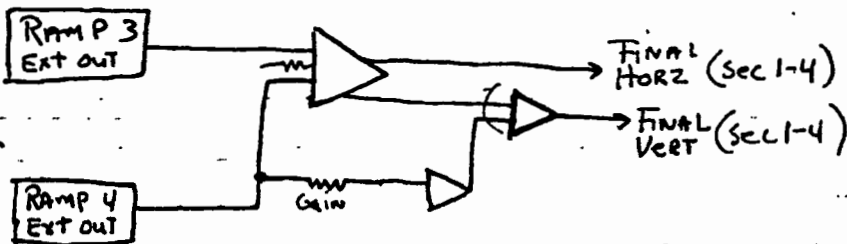


MOVING TWINKLE
(two ways)

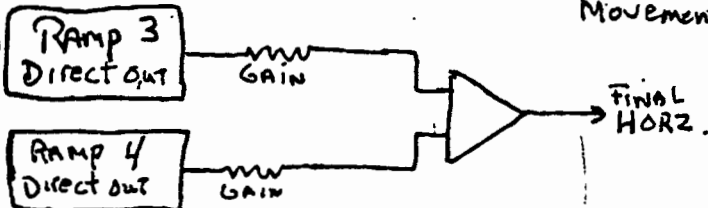
① Form star ... ② Osc 3 into WIDTH (sec 1-4)

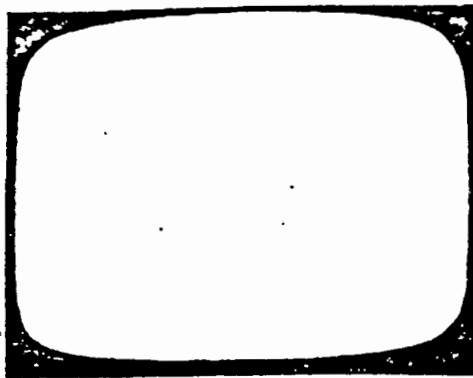


BLANKING ON and Off
Movement



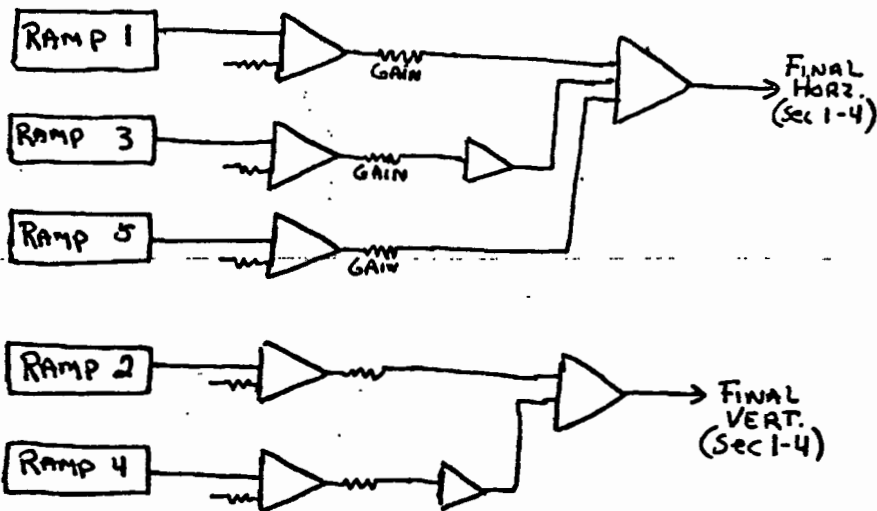
BLANKING ON and Off
Movement





TWINKLE move in a Circle

1. BUILD TWINKLE (EXACT $\times 100$
5 ~)

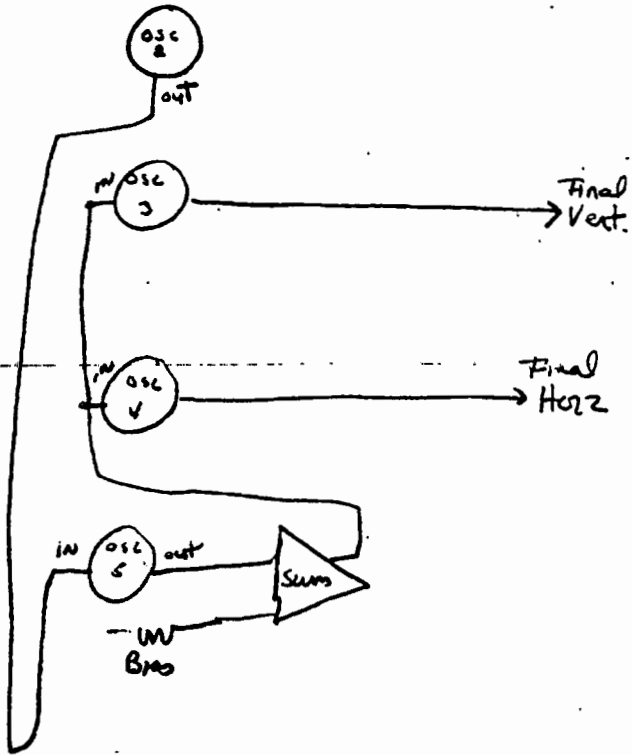


Ramp 1 move to Right
Ramp 2 moves down
Ramp 3 moves to Left
Ramp 4 moves up
Ramp 5 moves to Right

MUST Adjust
Rate and Ramp
trigger time very
precisely so
circular motion
happens

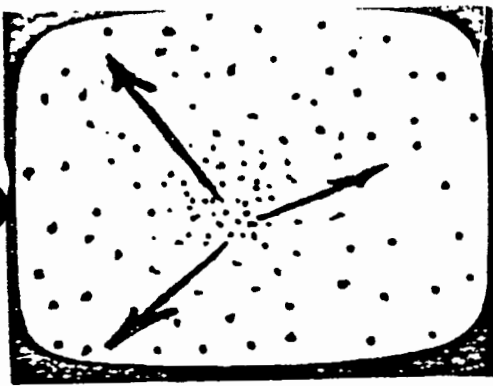


Raster to a dot



also	
Horiz Osc	Run
+	
Vert Osc	Run

Osc 2 - Lock Top ~
Osc 3 - ~ (Frame)
Osc 4 - ~ (Frame)
Osc 5 Lock Top ~ (Frame)



MOVING STAR FIELDS

BEGIN WITH A STATIC STARFIELD,

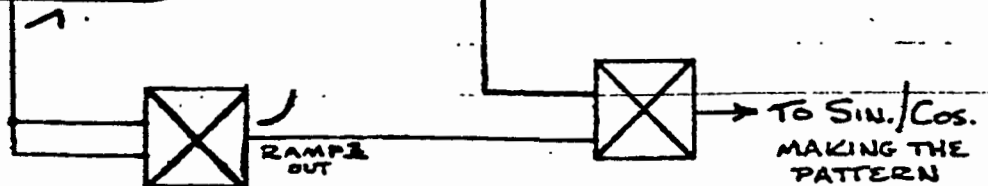
SET SYMMETRY TO "✓" RAMP
SET OFFSET TO "PLUS" OR "MINUS"
(NOT "BIPOLAR")

EXACT 505 IN FREE-RUN

SQUARE WAVE OUT
RAMP OUT

(PATTERN MODULATION)
TRIGGERED EXACT OUT

WHEN SYMMETRY AND OFFSET ARE SET ACCORDINGLY, THE SQUARE WAVE OUTPUT WILL DELIVER A PULSE CO-INCIDENT WITH THE FALLBACK OF THE SWEEPING RAMP. THIS PULSE APPLIED TO BLANKING WILL SHUT OFF THE RETURNING LINES LEAVING ALL THE "STARS" MOVING IN ONE DIRECTION ONLY ("OUT" OR "IN" DEPENDING UPON FREQUENCY SETTING).

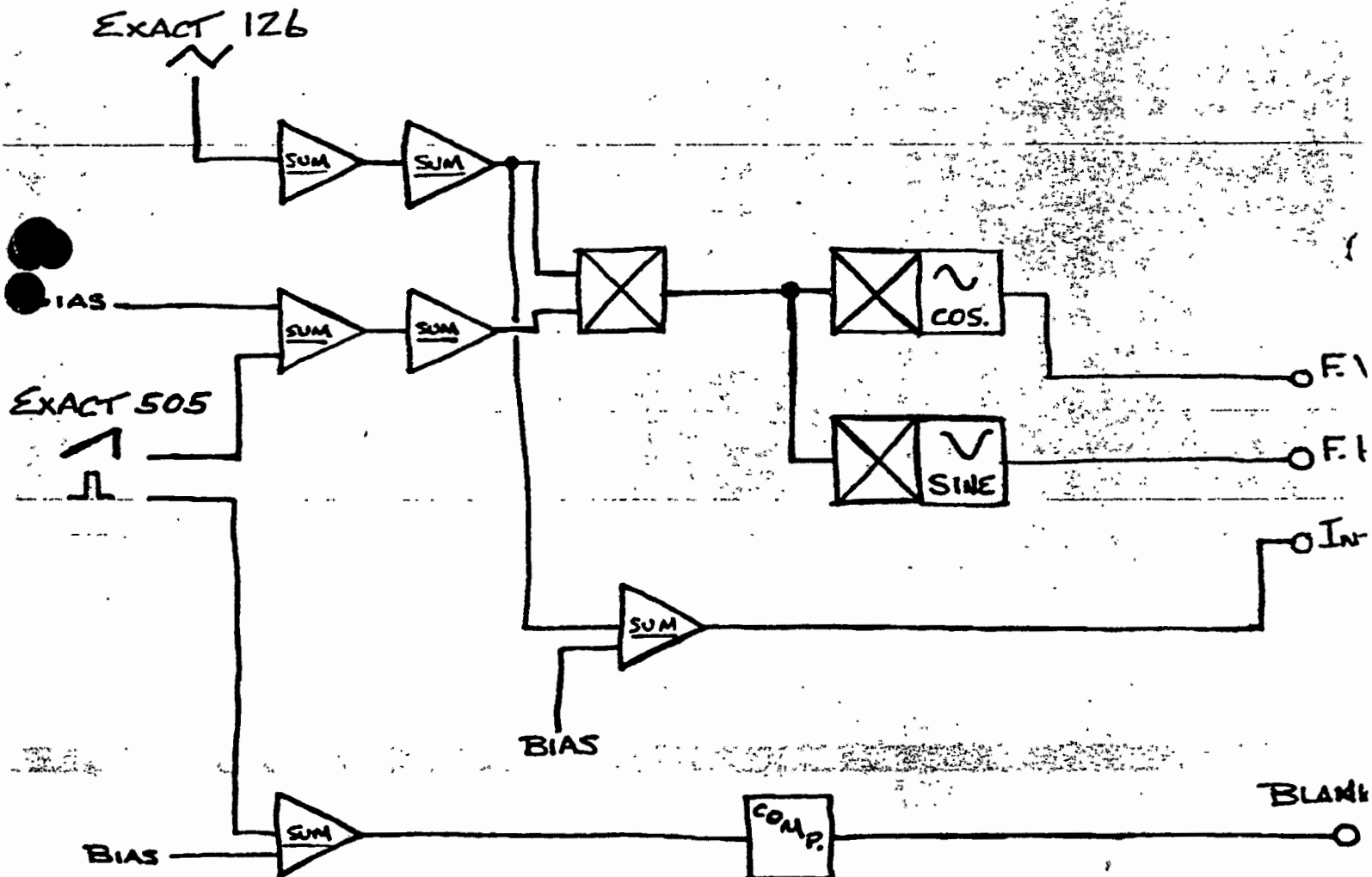


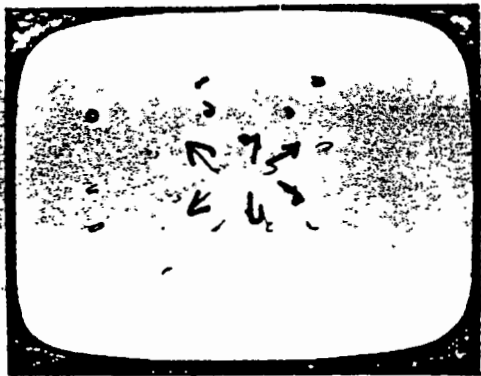
THE SQUARED RAMP WILL SWEEP THE STARS OUT IN A NONLINEAR MANNER, THEY WILL SPEED UP AS THEY MOVE OUT, CAUSING ADDED "PERSPECTIVE" EFFECT.

TO UNBLANKED PORTION OF RASTER (HORIZ SEGMENT BLANKING INPUT #2)

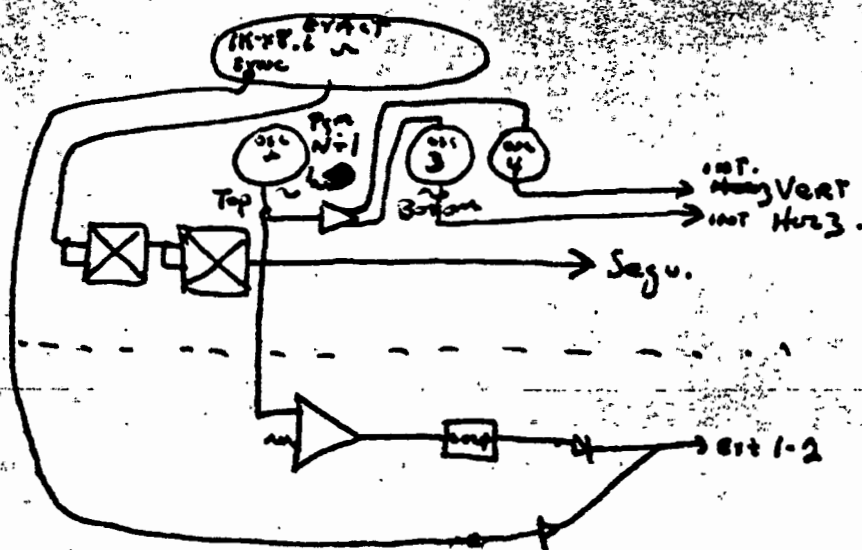
REVISED STARFIELD

1. RASTER TO A DOT
2. SINE INTO $\frac{H}{V}$, COS. INTO $\frac{H}{V}$.
3. EXACT 126 TRIG. BY H. RAMP (OR H. RESET)
10 K. RANGE; MULTIPLIER: $.1 \times 5$; AMPLITUDE MAX
D.C. OFFSET OFF; TRIANGLE WAVEFORM
4. EXACT 505 IN FREE RUN. RANGE $\times 1$; MULT. 7×4
OFFSET NEG.; SYMMETRY \nearrow . AMP 1 SQUARE OUT (TO
BLANKING); AMP 2 TRIANGLE (RAMP) OUT.





Russ STAIRFIELD



- 1.) Cube Exact
into Segu.
INT to Final
(length almost to line
vary)
- 2.) Sine/Cosine Osc 3 & 4
into Horiz & Vert (initial)
(Osc 3 wrapped around about 1/2 to
vary)
- 3.) Osc 2 into Osc 3 & 4
osc 2 select $P_{gm} N+1$ 9 (90° low
freq.) Allowed 2nd lock (low freq.)
Amplitude - Full up

Adjustment of Sequence Bias
with exact bias makes center
circle small in middle

BLANKING
Ext 1-1 enable → Blanks off for
dots (static)
2nd lock

Synout diode into Ext 2-1

Osc 2 into Bias sum amp into
comp into diode - Ext 2-1

(will blank off static rings)
(if need be....)

Bias + amplitude on Ext 1
very critical for stable
movement...

2nd offset

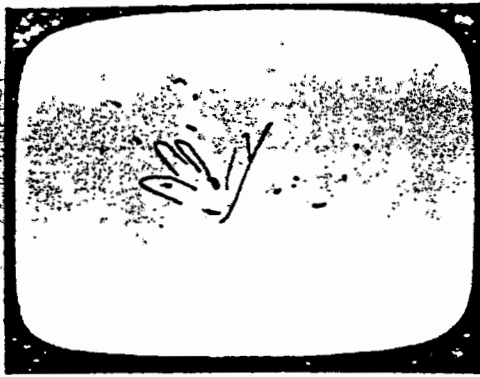
Osc lock

Ampl.
1st offset

- Also want stars to blank on
a beginning in center not in
middle

- Also intensity comp
want stars dimmer in beginning

Ext 1-1



Sol of
Star Field.

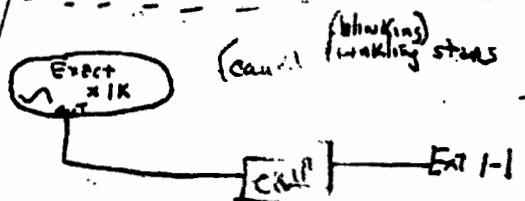
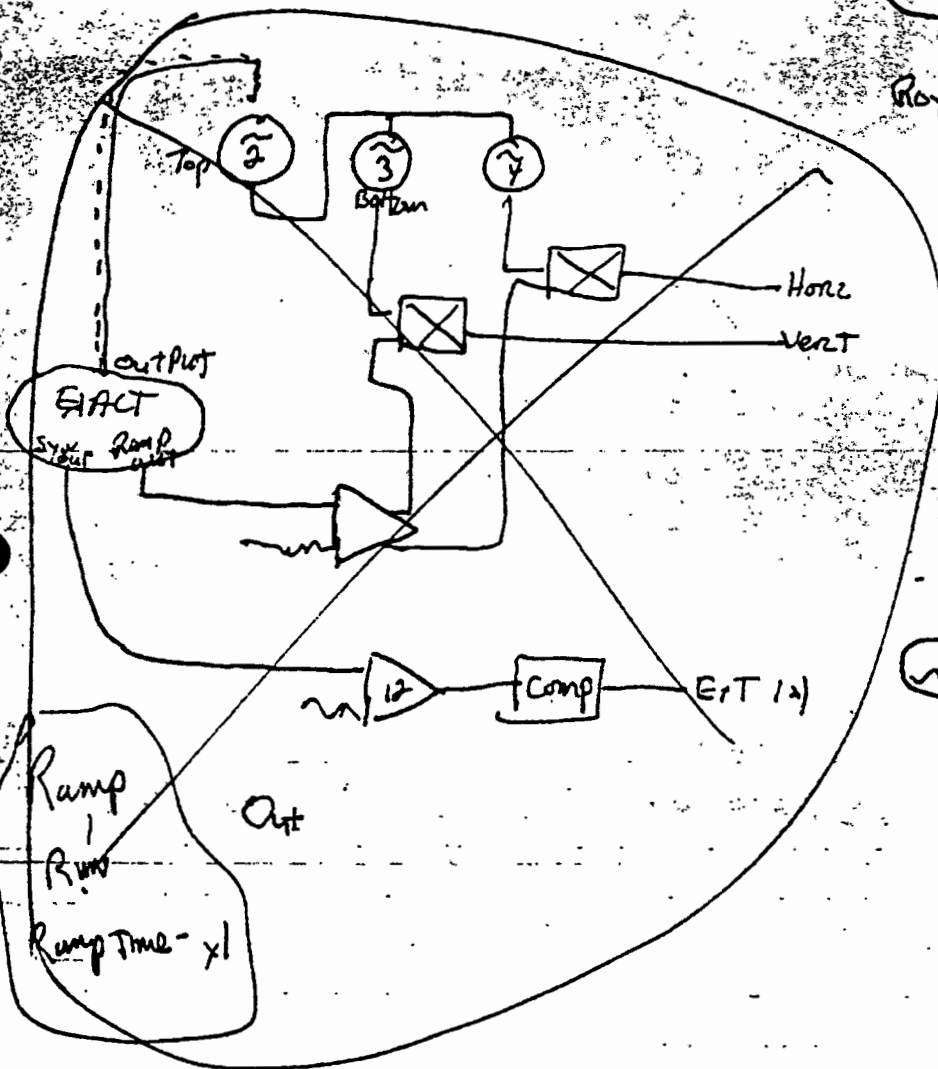
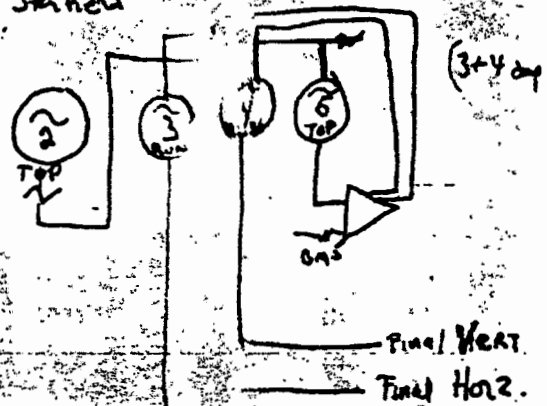
Osc 2 - Per. 10-1K

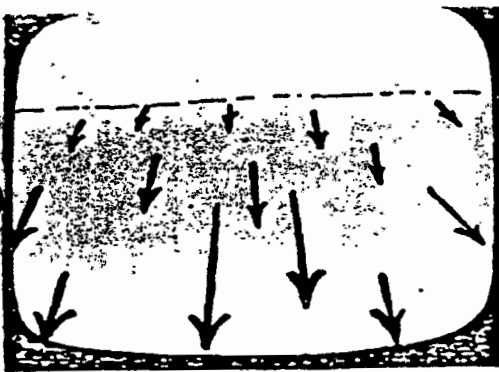
- N=1

+10

1. Form a grid with 3+4 (than 4)
2. Form nice sp. with 2+5
3. Play K most of sp. off many stars.

Ray's Star Field

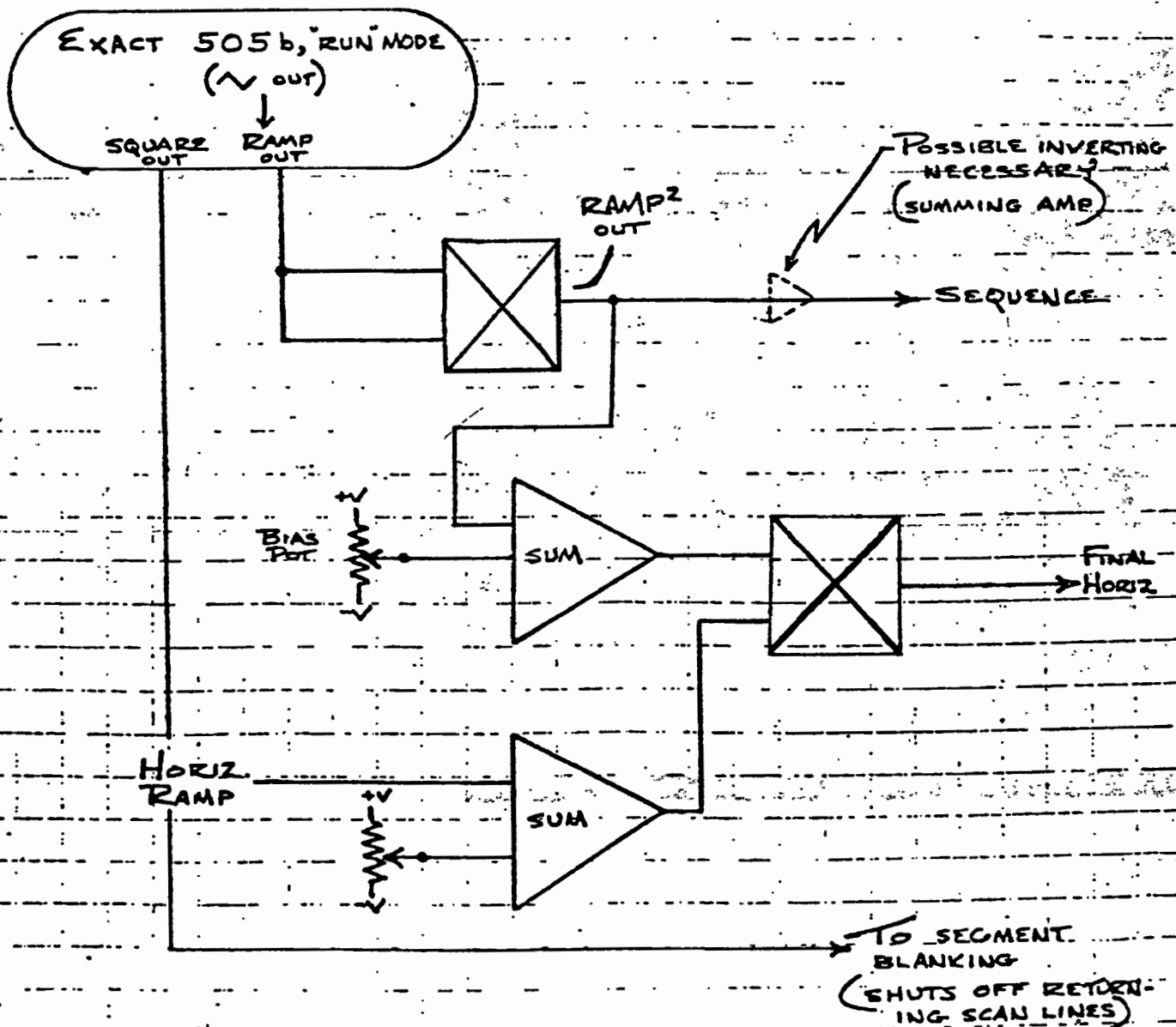


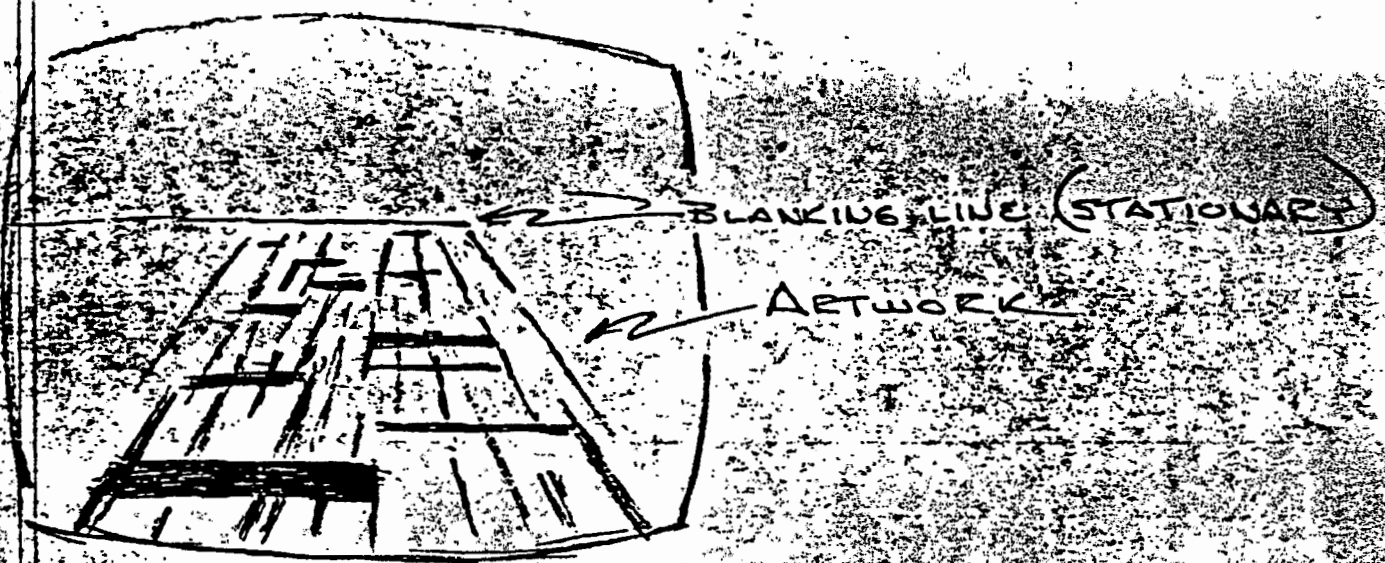


IMPROVED SLIT SCAN EFFECT, (SPEED FAIRINGS AND SIZE-MOTION DIFFERENTIAL)

DIRECTION OF SCAN: \leftrightarrow
LENGTH TO ZERO

SYMMETRY TO "1" (RAMP)
OFFSET TO "PLUS"



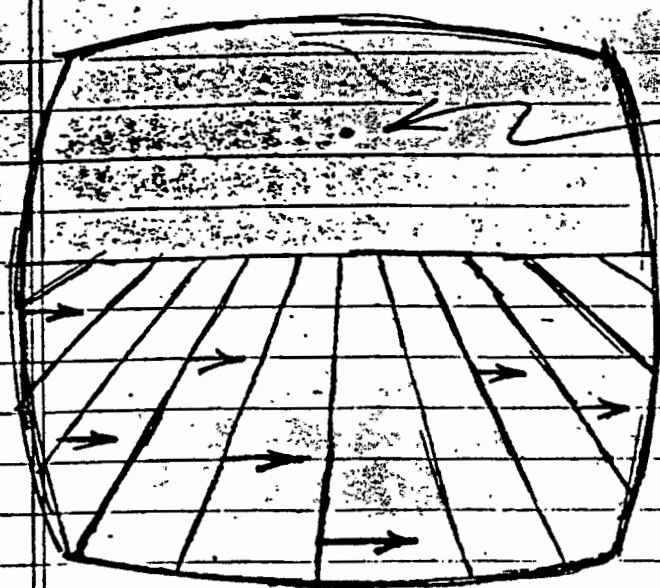


PERSPECTIVE ADDED TO ARTWORK WITH OSCILLATOR ON FINAL DEPTH (FRAME LOCKED TO "PINCH" ARTWORK:



TOP OF "PINCHED" RASTER IS BLANKED. BLANKING LINE APPEARS STATIONARY BY APPLYING VERT. RAMP TO BLANKING INPUT, THROUGH SUMMING AMP WITH BIAS CONTROL, BIASING THE VERT. RAMP TO CHANGE THE POSITION OF THE BLANKING LINE.

ARTWORK IS RAMPED THROUGH VERTICAL AND DEPTH WITH A SEQUENCE RAMP.



VANISHING POINT
APPEARS TO REMAIN
STATIONARY? WHILE
PLANE MOVES HORIZON-
TALLY.

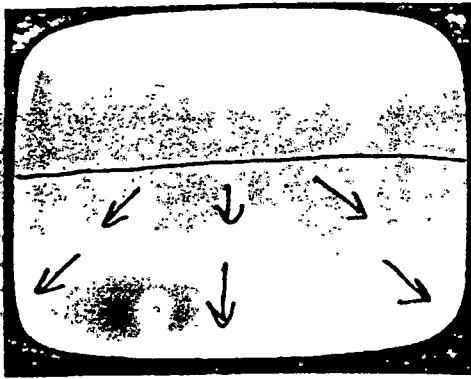
#5

1. (2) — FINAL DEPTH = "PINCHES" ARTWORK (OSC LOCKED TO "FRAME")

2. ADD PERSPECTIVE LINES BY SUMMING "HORIZ. RAMP" WITH OSC. #2 SET TO "PROG", "N", "÷1" AND SET LINE CHARACTER WITH 12 POS. SWITCH. APPLY TO SECTION BLANKING.

3. SET NUMBER OF PERSPECTIVE LINES BY ADJUSTING OSC. FREQUENCY? (LOCK TO "FRAME" FOR STATIONARY LINES)

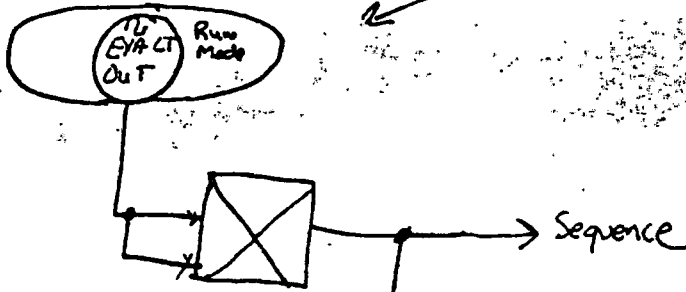
4. LATERAL MOTION CAN BE ATTAINED BY RAMPING "HORIZ. AXIS" OF SECTION.



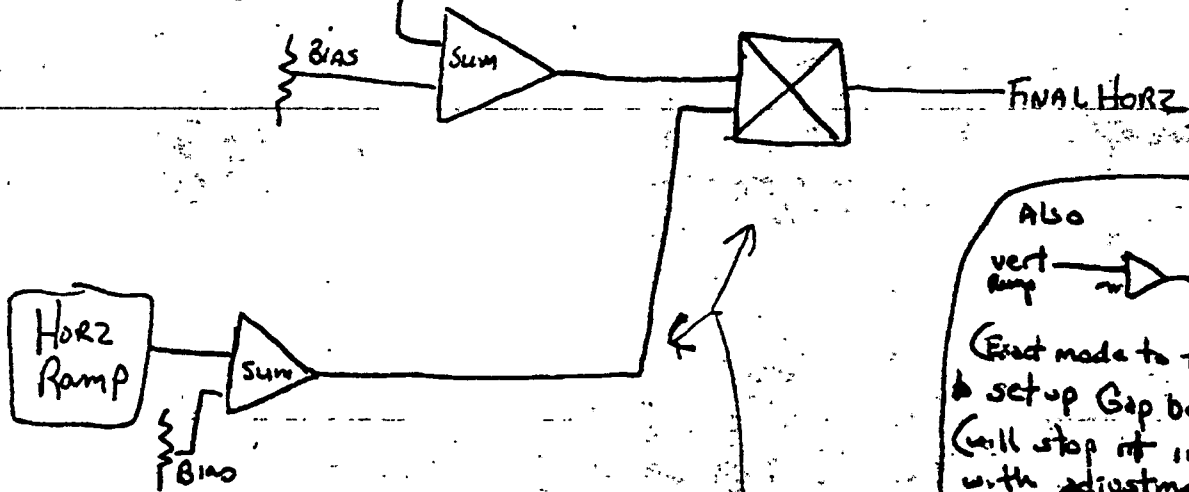
Slit Scan
Length to Zero

APT

try to revise... (see below)

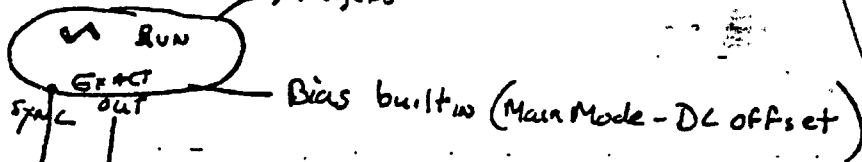


when setting up line (crosshairs)
adjustment of graphic cameras
vert & horz. gains & offsets
very critical for max. amt of
horz lines (since Exact usually not 1K)
for making lines all line at raster
ends....



Also
vert ramp → [] → Exact
trigg
(Exact mode to trig) will help
to setup Gap between ends.
(will stop it in center screen
with adjustments so ends
can be lined up cam gains
adjusted)

Roy's Slit Scan @ Russ modifications

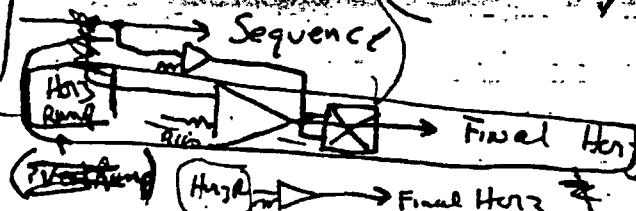


Bias built in (Main Mode - DC offset)

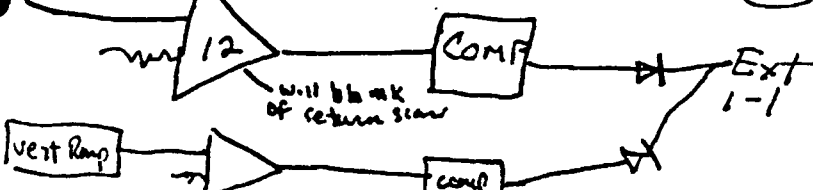
with Sequ.
make final a dot
not affected by int (mov)

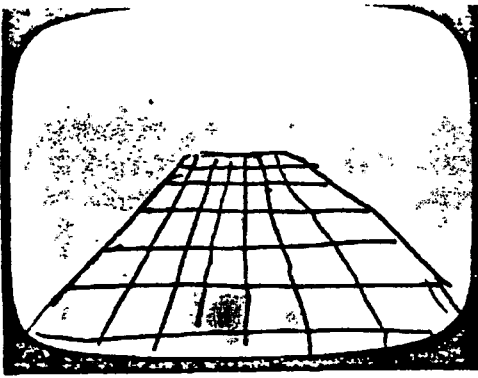
(also Osc 2 into Int Horiz
(used))

Segment Blank

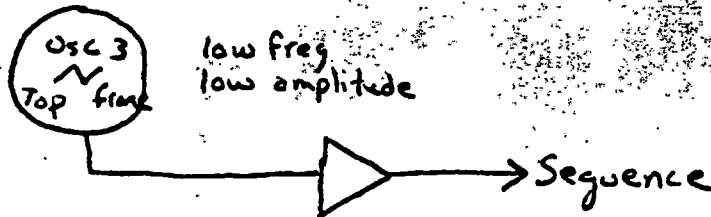


this will widen out
Slit Scan



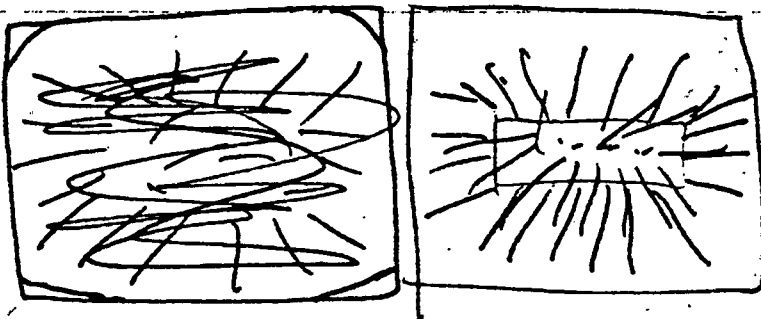
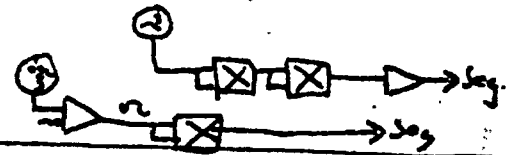


Static SlitScan (Plane @ perspective)
(strawman lettering)
(Run crawl thru via posterization)
(into soft wipe)



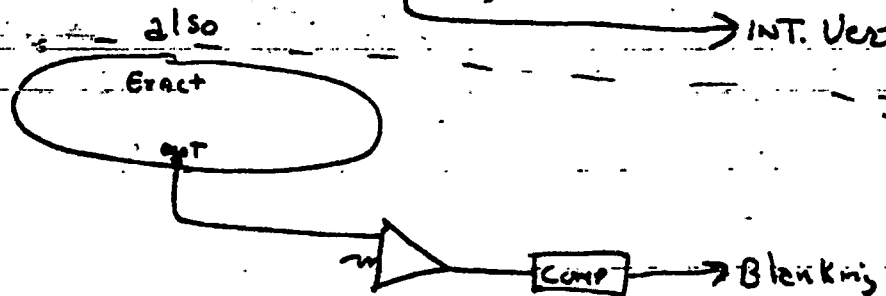
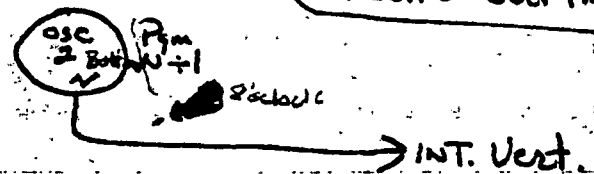
1.) Final at top with Horiz Osc on, tweak sequence till final steps in position, int. moves

2.) for more extreme perspective
Square or cube
osc out



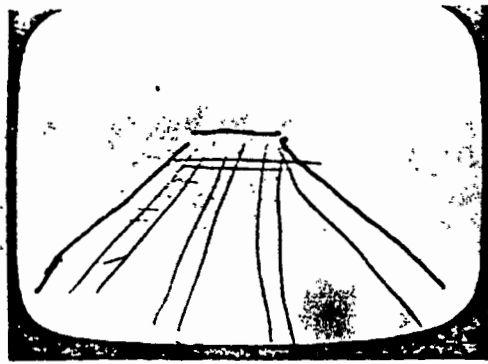
Spoke type Animation

⊕ same patch as above
with (input either convergence
vert lines only
OR cell of vert lines)



also



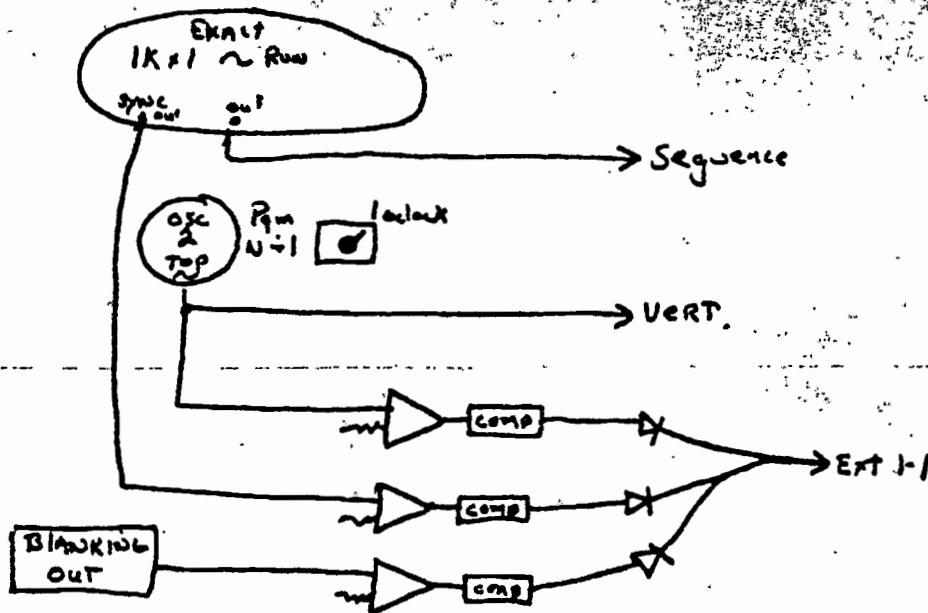


Christmas trees +

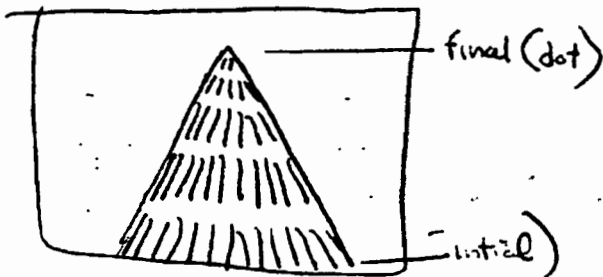
Slit Scan @ Hi-Freq. and
and Blanking

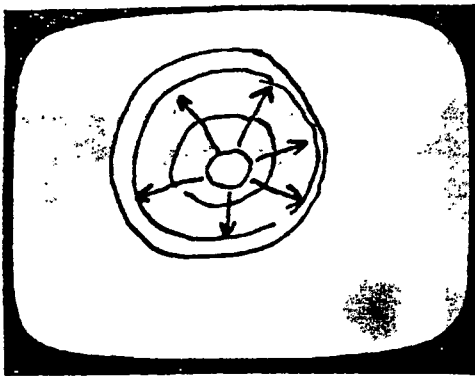
Length to a line

Top is initial
Bottom is final



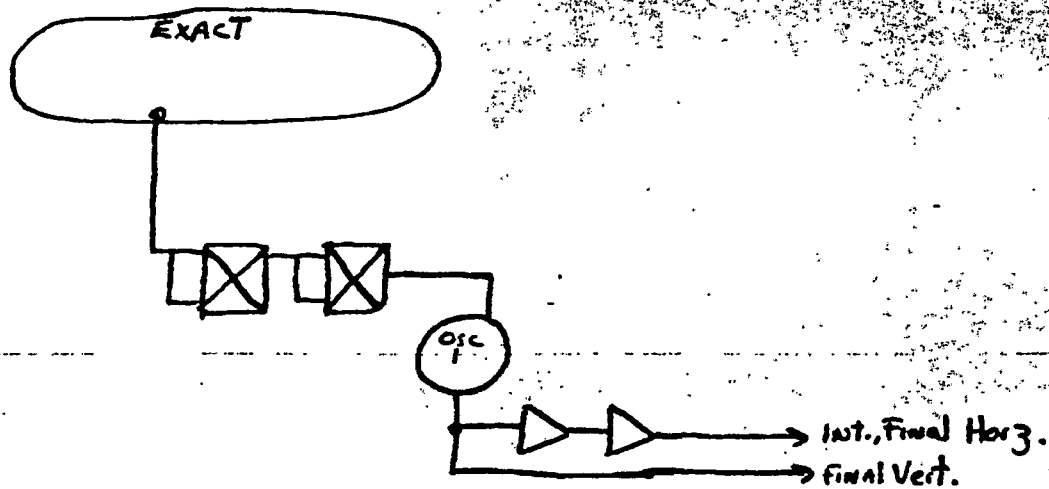
also make Christmas tree



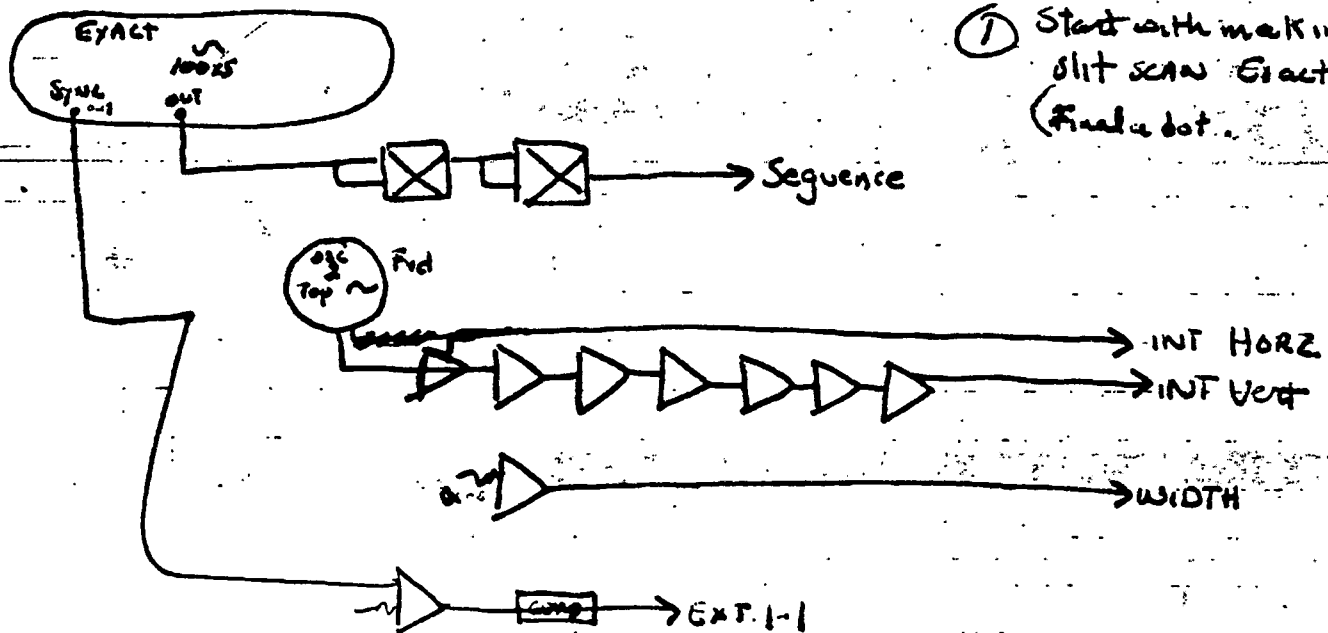


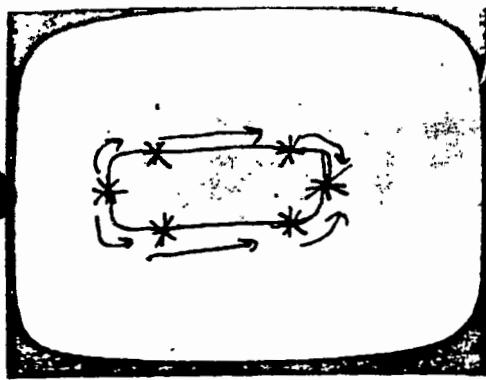
Circular Slit Scan

1. Bring to a dot
2. Build circle with osc. 1
3. multiply Osc 1 @ Exact
4. Add blanking



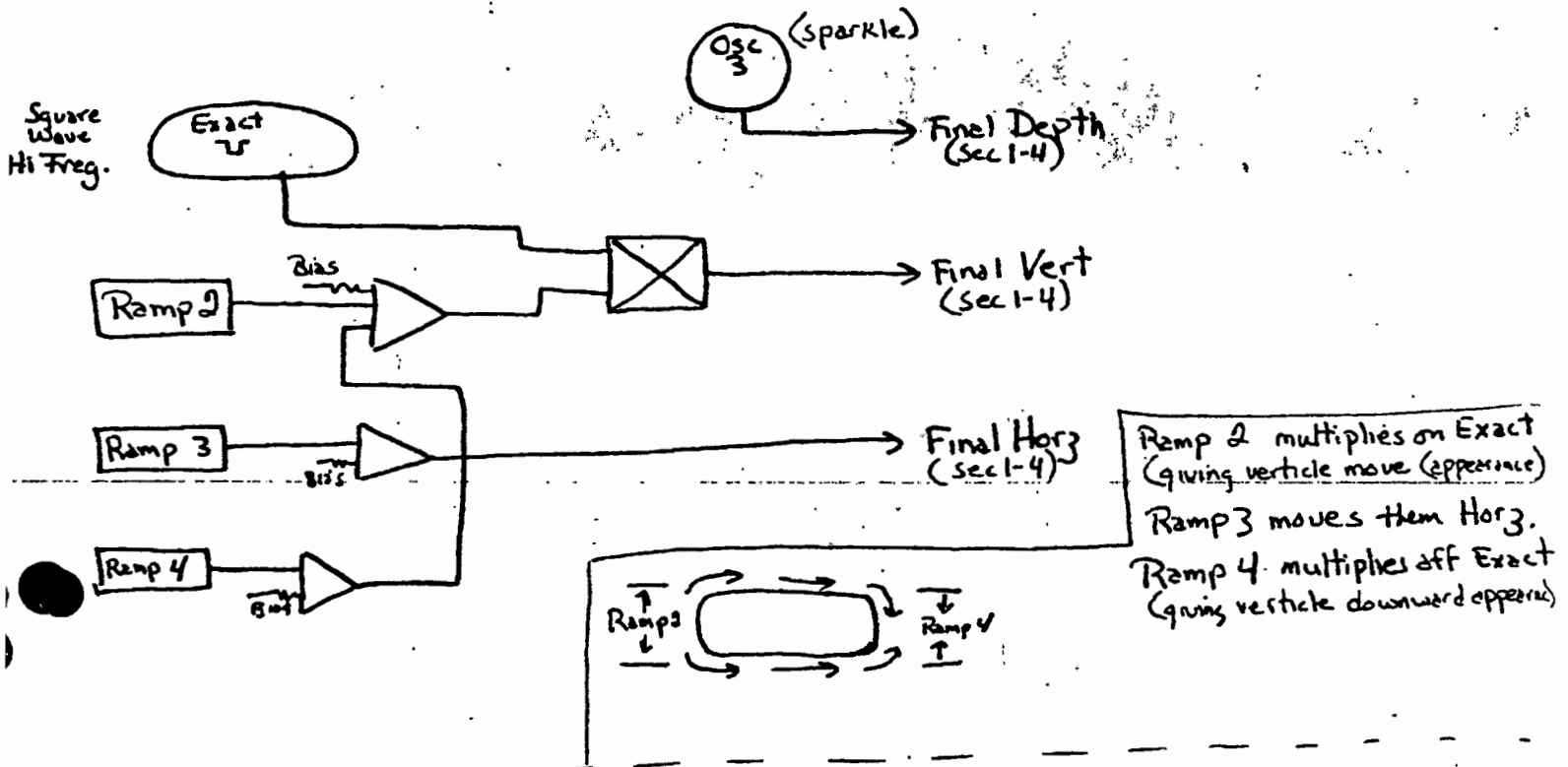
① Start with making Reg slit scan Exact into Seq (Final dot..)



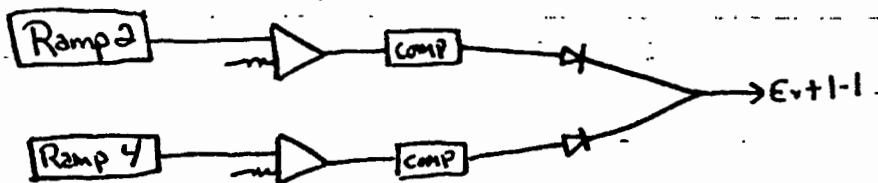


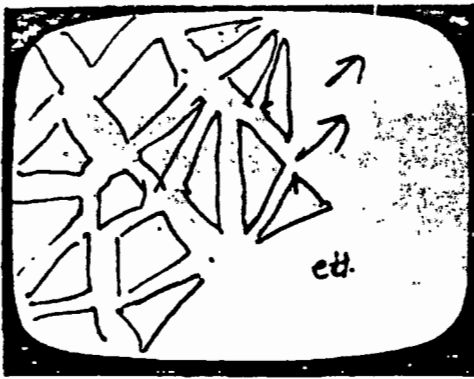
Sparkle (twinkle) 2 From 1

- 1.) Build Sparkle with Osc 3
 2. Exact square wave at Hi freq gives illusion of 2 sparkles from 1
- (see special blanking wipe
Blanking Section)



Blanking





Abstract Pattern (for filler use)
ie Hershey's chocolate

(Bring Scan Cam in close + out of focus)

~~Rotation Dot to Find~~

Break into 4 section

Rotate... to a dot

Form a star twinkle

Exact

$\sim \times 100$

→ Depth 1-4 (twinkle)

OSC 2

1

Bottom

Scan 1

→ Vert 1-4

OSC

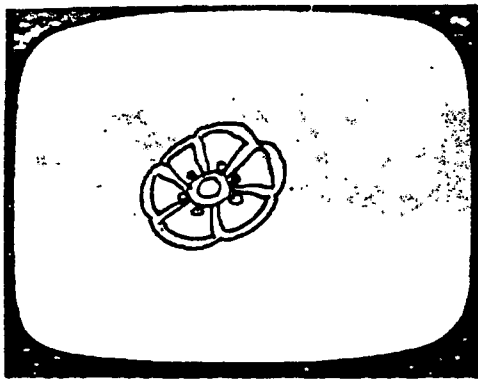
2

Scan 2

Tie Line

→ Horiz 1-4

} moves twinkle
around very fast
forming pattern...

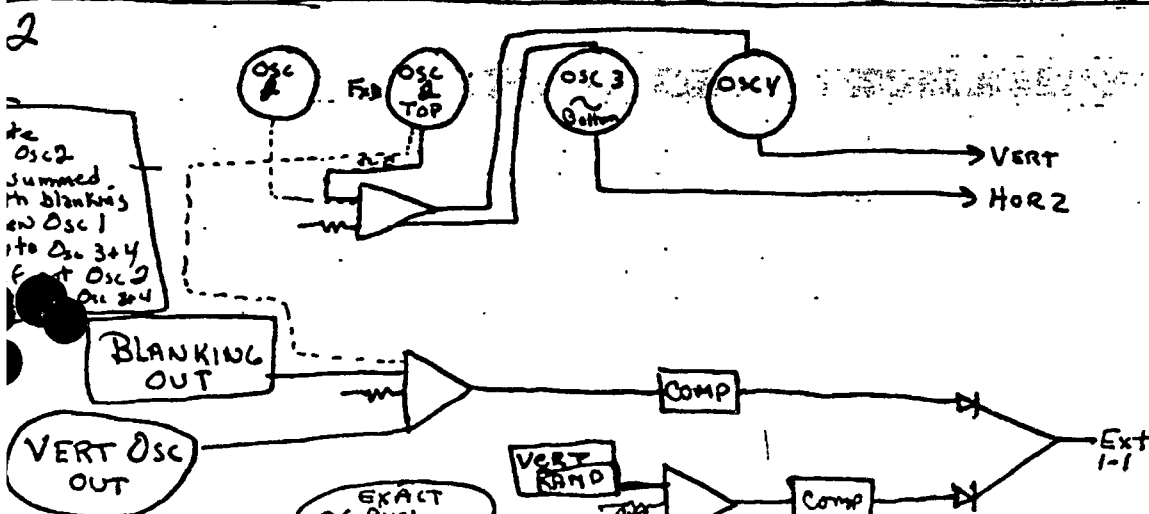
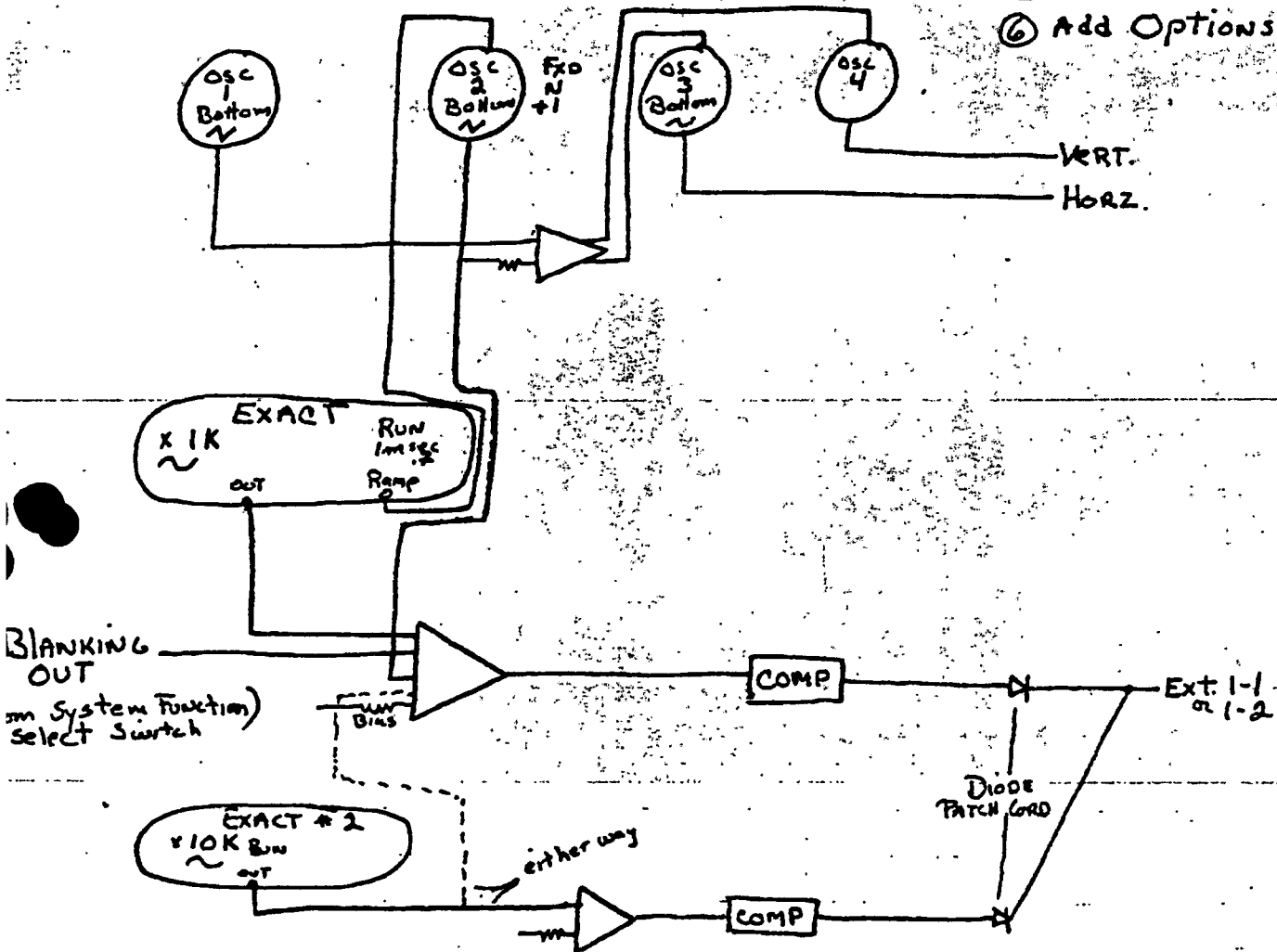


MANDALA/Kilidoscope (two types)

Also MAKES CONES + TUBES

- ① BRING LENGTH TO A LINE
- ② Depth To a Dot (to start)
- ③ Sine Cosine Pattern
- ④ Add Hi Freq Osc (#1)

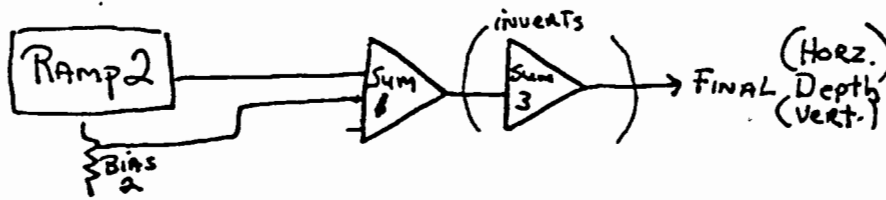
- ⑤ Feedback Blanking
- ⑥ Add Options



CREATES Abstract which can be used as background or as filled...

Oscillation of Raster in Ext. Sequence

1. Adjust Sequence So final position
2. Build Bias Ramp #2 for movement int to final
O. Bias at final position (det by Seq. Control)
For int. position use appropriate pot (comm. changeover)

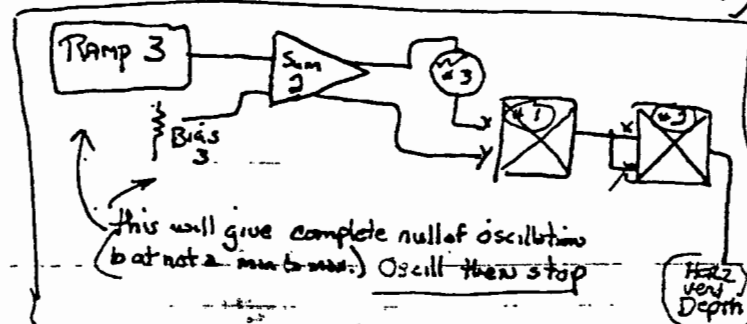


(Ramp 3 depending on start set* will set off oscillation which will go on then off (min-max) again (or by bypassing osc. can make another move + then back again)

Adjustment of this Bias #3 will null out Osc 3 to final position (or Bypass move)

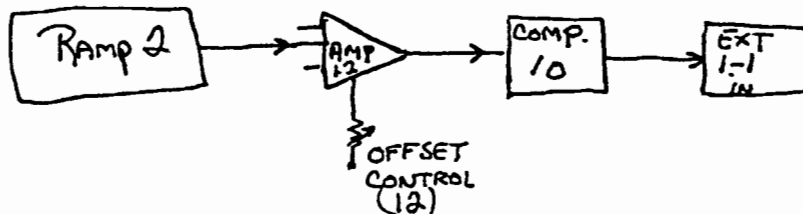
(Bypassing Osc. So Raster will (int. to final Ramp 2) then Make another move + back to original position)

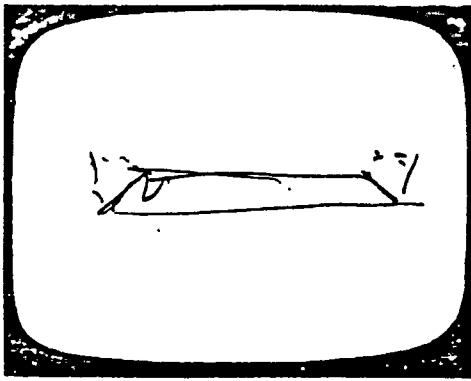
* Can be made to happen during int to final move of Ramp 2 or after it.



Also for blanking off dott

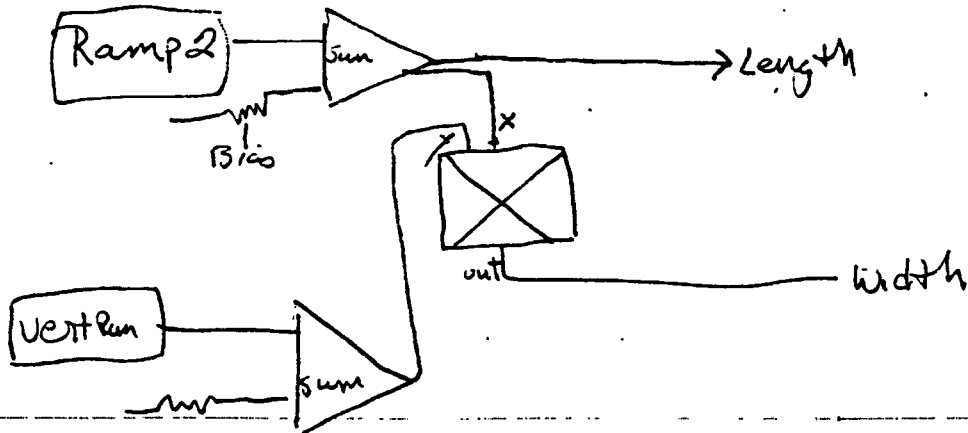
Patch Panel Seq. Blanking





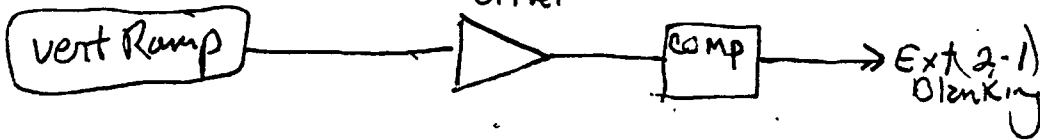
words

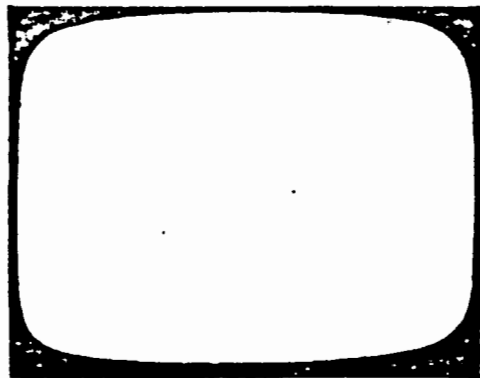
Rise fun. & line @ perspective



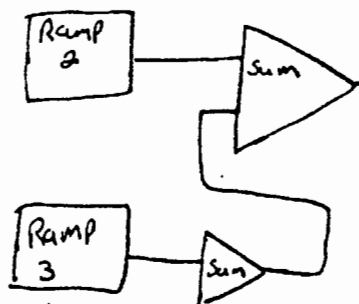
Seg Blanking

(Biased Gain
Offset





Motion
From Final to initial then back to final



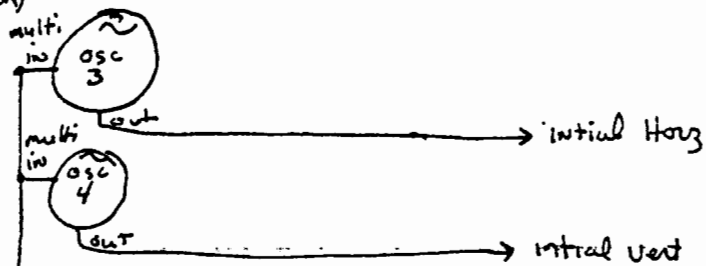
Sequence
(Biased to start
in final go to initial) by Ramp 2

then Ramp 3 sends it from initial to final

Sequence commutator
is the bias (to make
sure in final turn on Horz
osc. adjust sequence

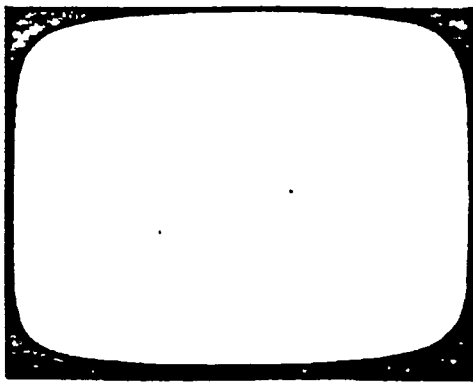
also

(Animation)

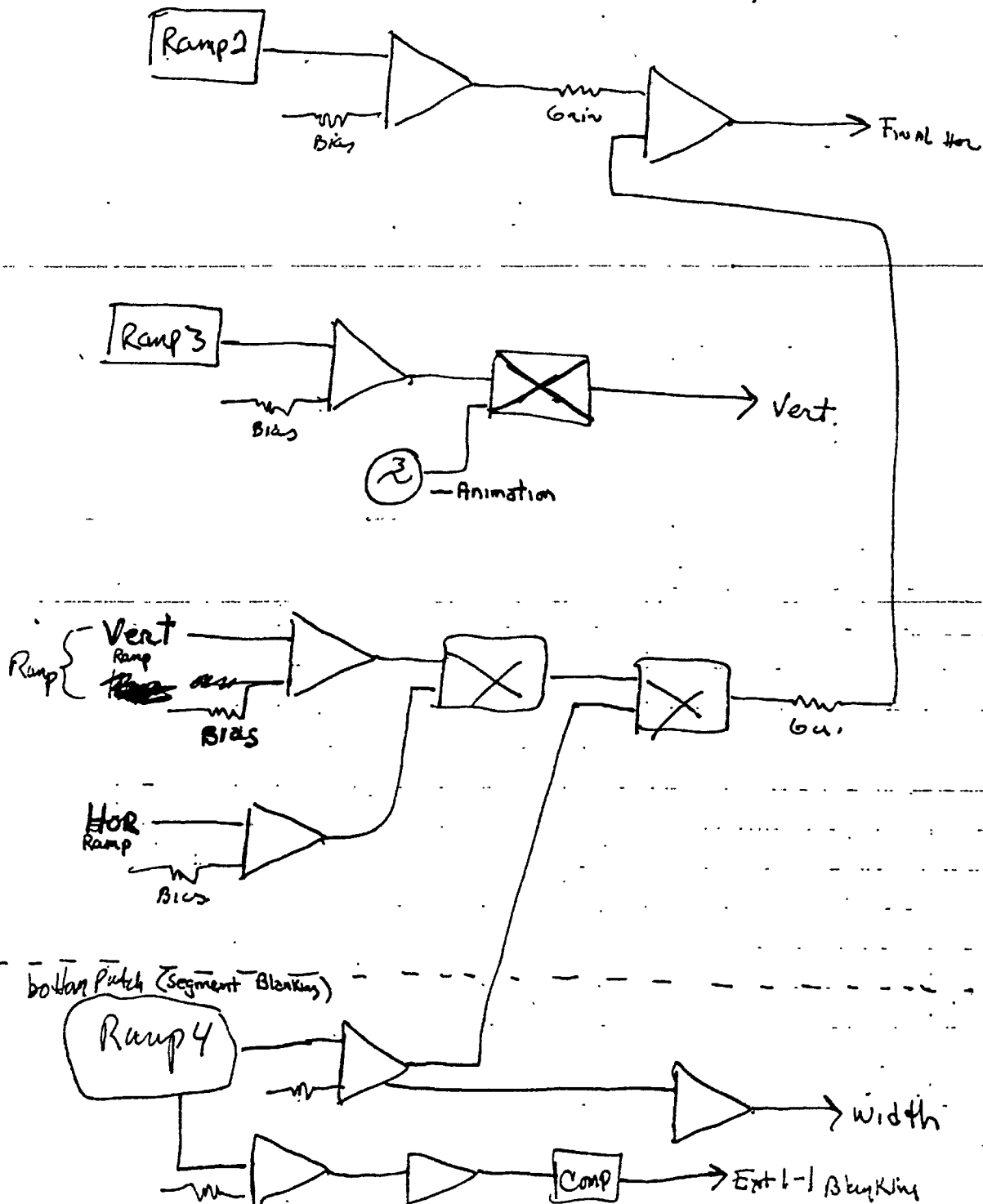


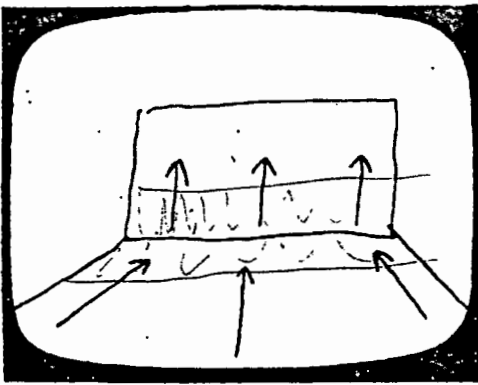
(Basic Sin/Cos Patterns)
see previous notes

From Phased
Locks
to bottom
of frame
(+ Seq.)



Word in from Side Oscillating
Oscillation Resolves off
Word then folds to a line with perspective

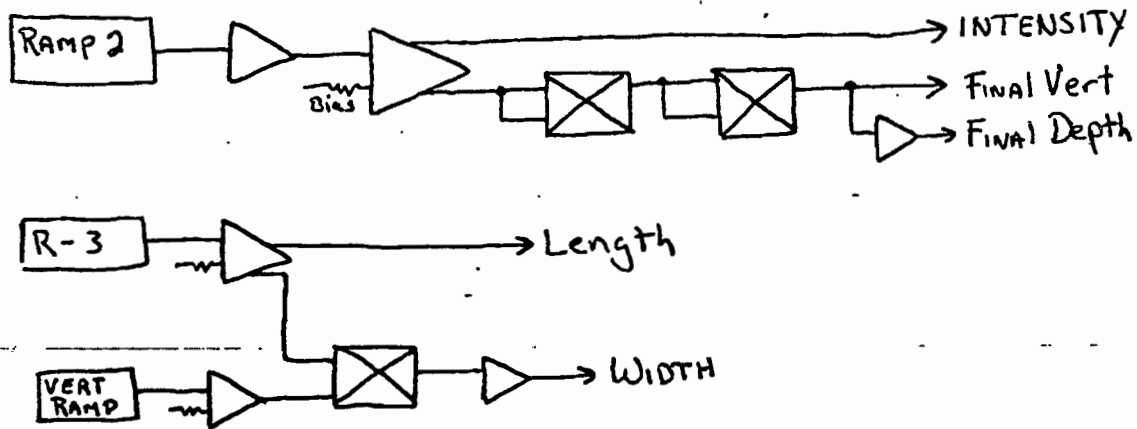


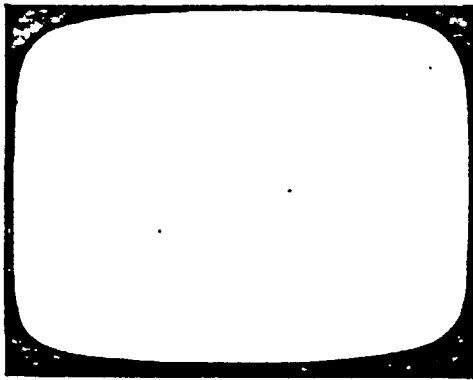


1 section

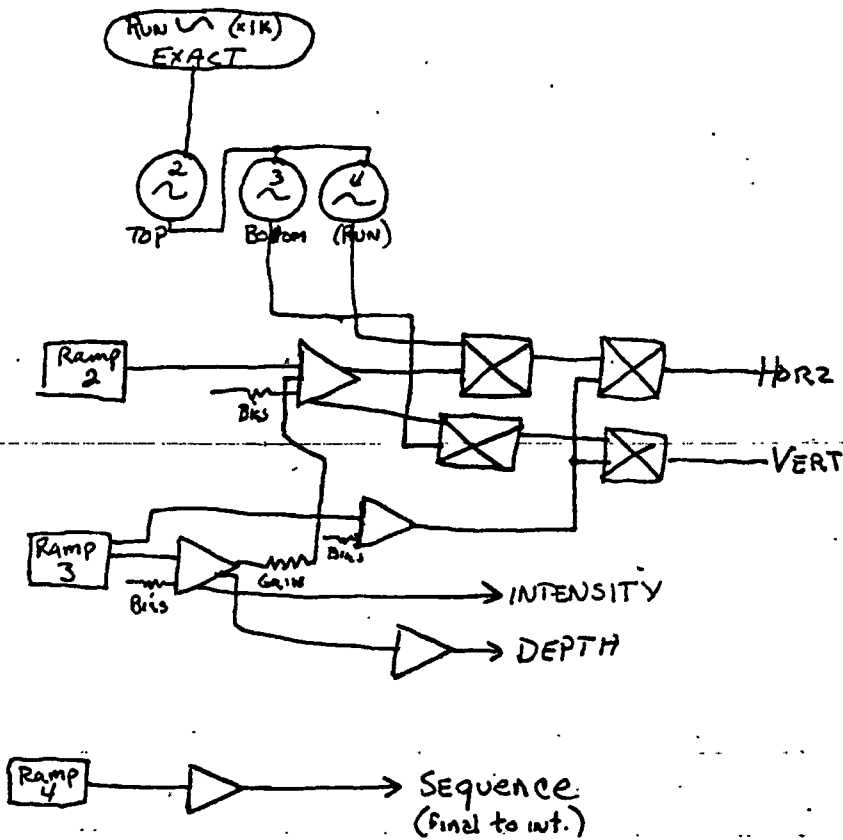
WORD comes in slit scan like
then moves up straight

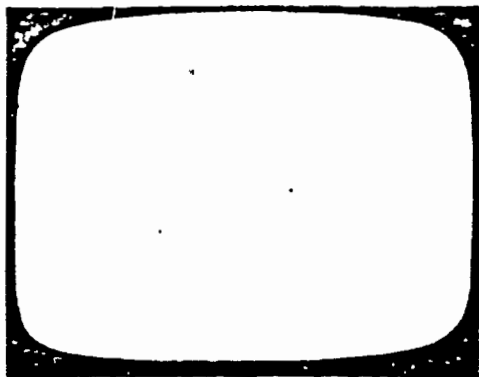
- 1.) Flatten with length, perspective @ width
- 2.) with Ramp 2 move in final from big to small
- 3.) with Ramp 3 ~~multiply off~~ - bring length + width to norm





- start at dot
- Animation starts
- Animation zooms out
- Animation Resolves to word
- Word Zooms to a dot

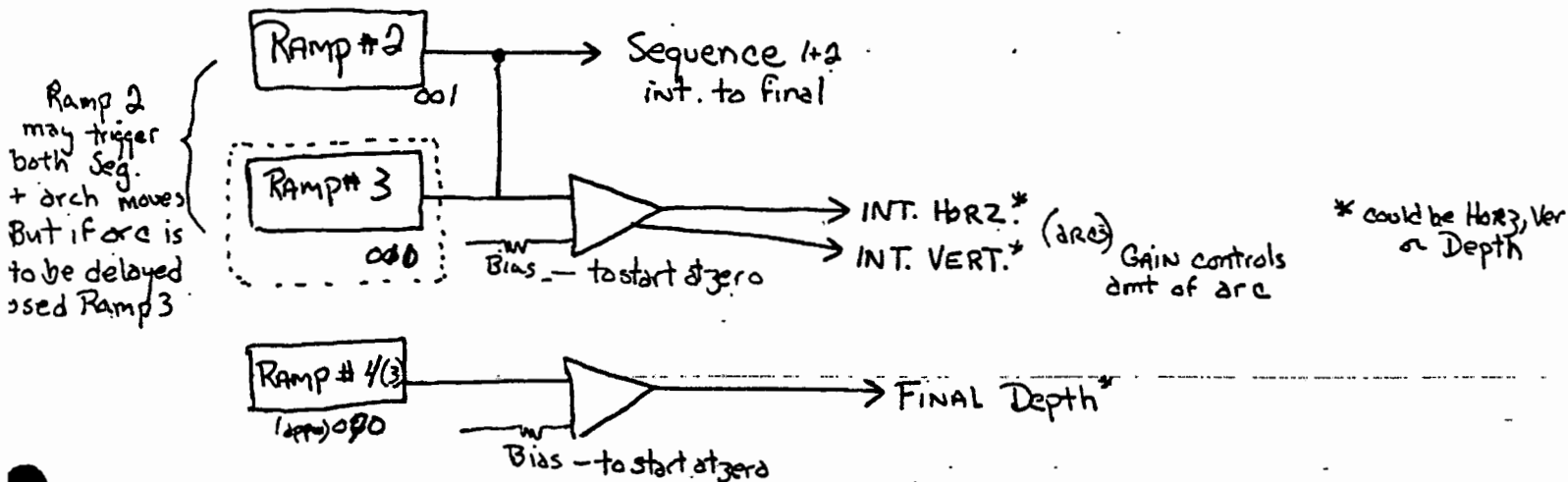




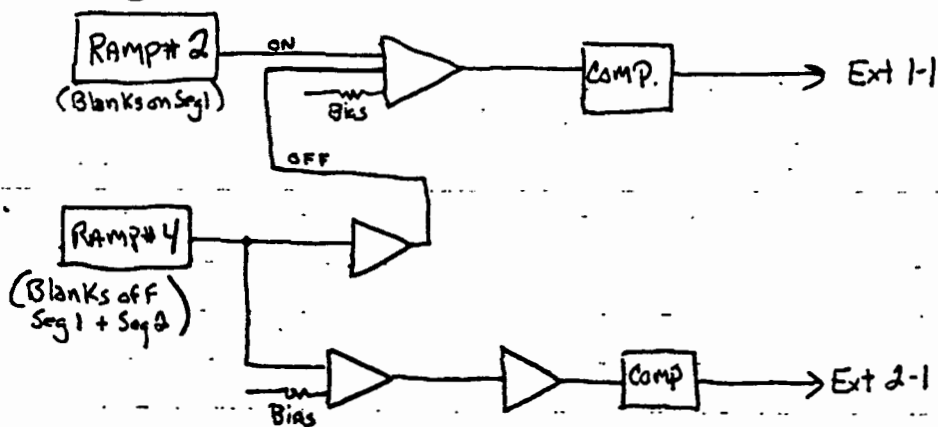
2 words....(2 segments)

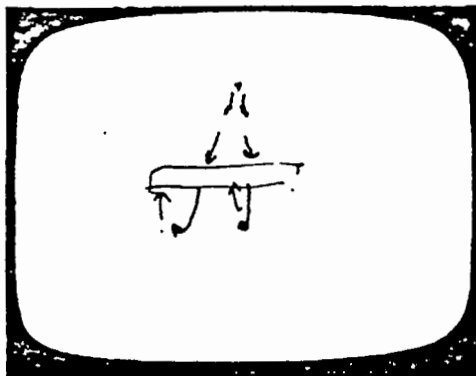
One ~~does~~ comes from a dot @ a horz arc
 One from large @ a vert arc

Both to center... then both to a dot



Blanking





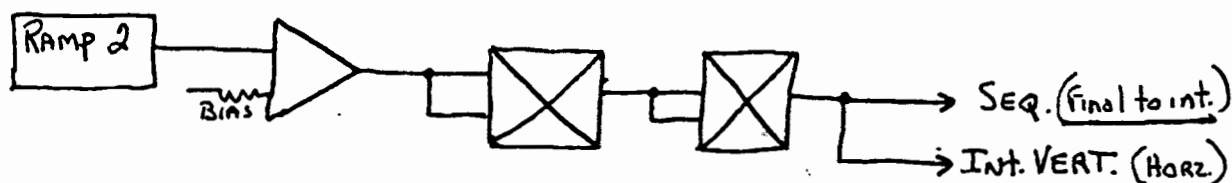
FERRING @ ARC (vert.)

FERRING

(slow then fast)

Seq. Bias
① ② ③

Bias
1-2 block

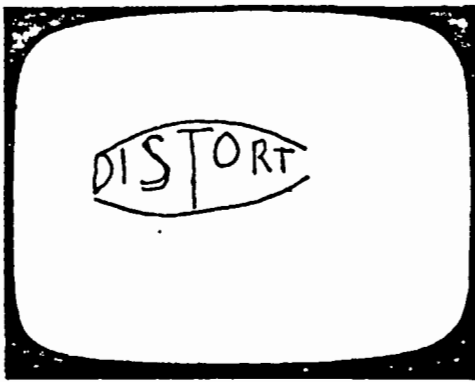


Bias will ^{also} control Ferring (either slow then fast or fast then slow)
Seq will be final to int.

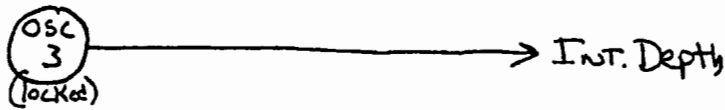
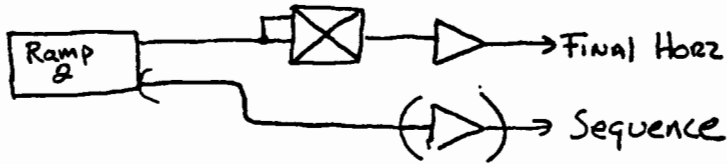
(To Reverse just invert Ramp before going into summing amp)

Ferring on Sequence (NO ARC)

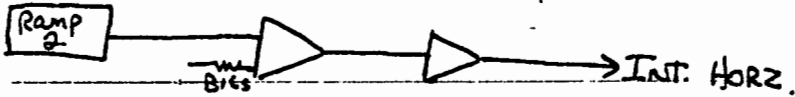




Word starts normal
then distorts
then drops down
(or other)



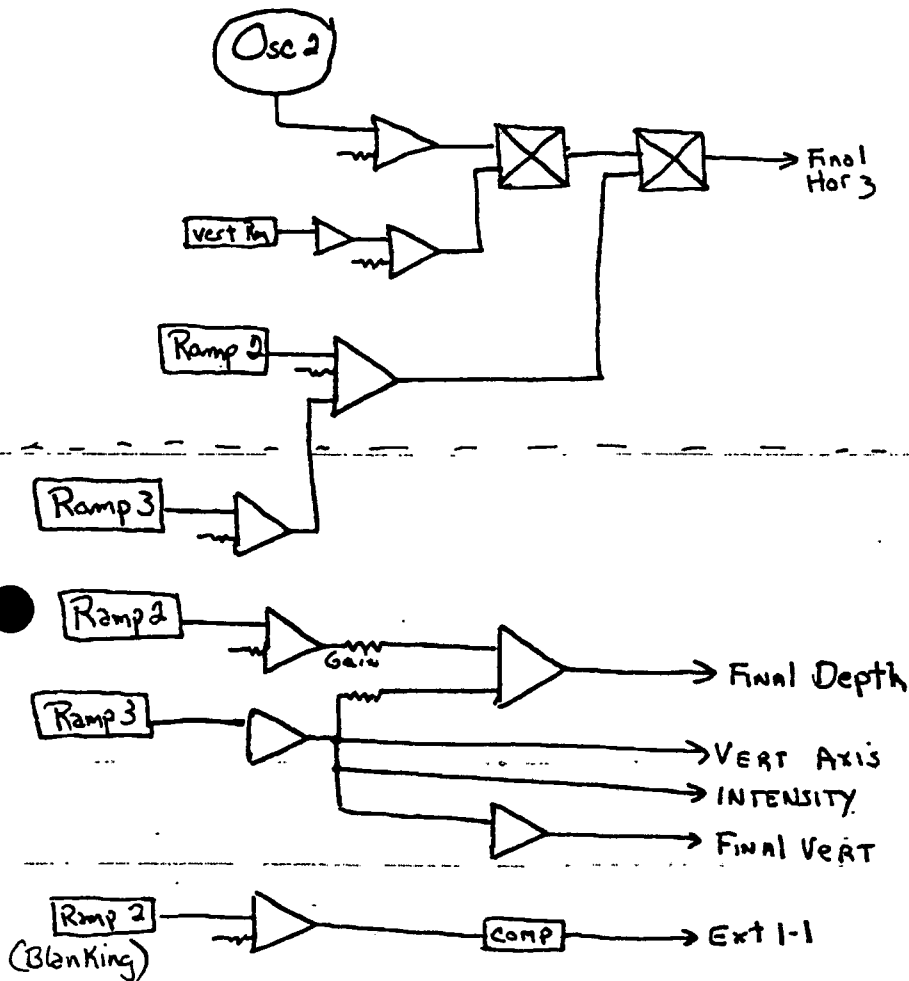
(Segment Blanking Patch Panel) -----



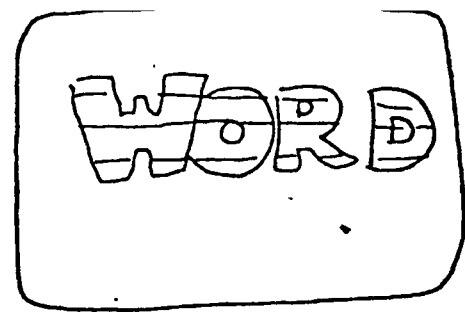


start at
Dot
Grow Big (with stretch)
then snaps to medium size
(all in one move)

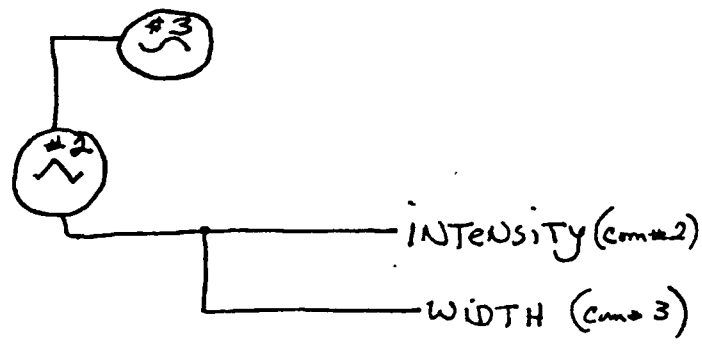
cell at 70 - 1040 1 01



Flicker or Lives Thru Word

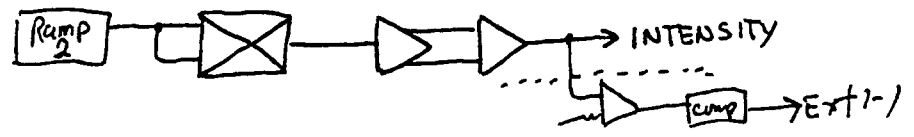


Glow's
see below



Also adjust with colonizer (level Detectors)
AND overall intensity (scan control)

Glow



if need be double it again. (+ invert)

Ramp 2
trigger intensity on

Bias
(to start at zero)

INTENSITY

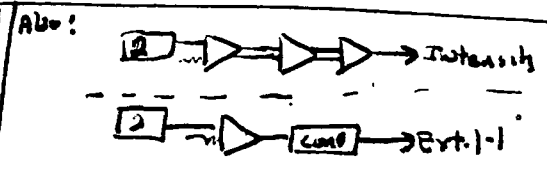
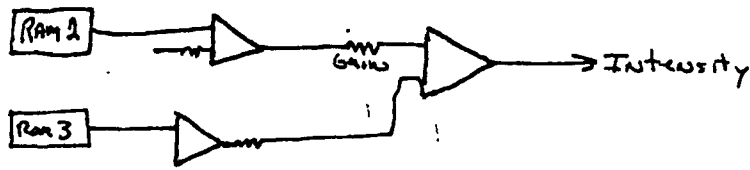
Blanking

comp → Ext 1-1

Ramp 3
triggers intensity off

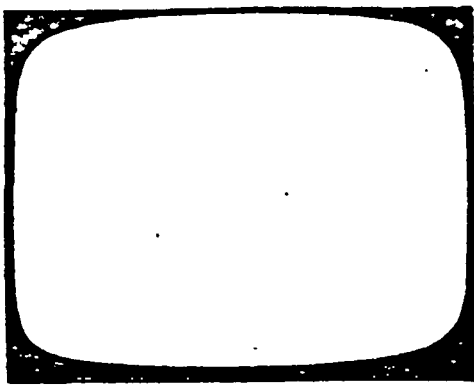
Put tissue paper over CRT
Also put scan cam slightly out of focus

Glow A allows you to
choose Rate on
then Ramp 3 choose Rate off



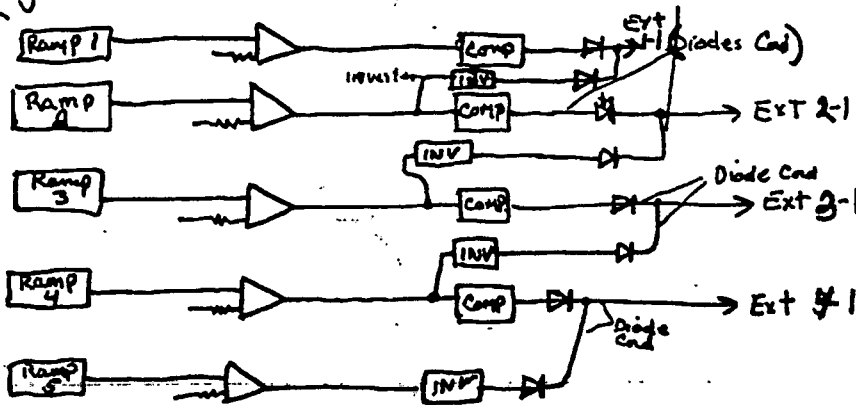
Blanks on very bright
Ramps down in intensity out

Glow beh:
word
for
BAN
Glow
type
ca.

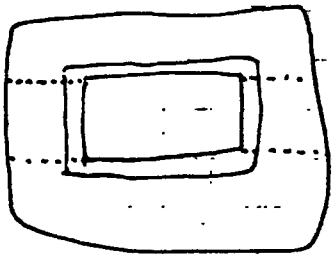
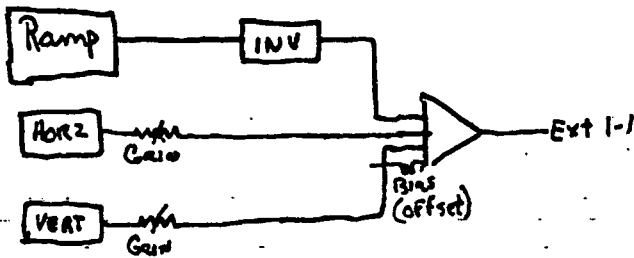


Blanking On and Off different section
using diode patch cord

Segment Blanking P.P.



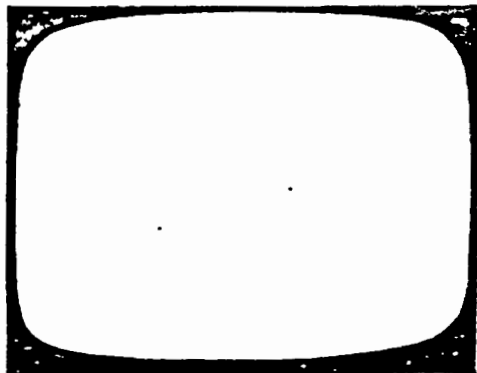
Blanks on (Ramp 1 - Sec. 1)
Ramp 2 - Blanks - Sec 1. off
turns Sec 2 on
Ramp 3 - Blanks Sec 2 of
turns Sec 3 on
Ramp 4 - Blanks ^{Sec 3} off
Sec 4 on
Ramp 5 - Blanks Sec 4 of
all sum amp are offset..



BLANKING OFF RASTER
around RECTANGLE (1 section)

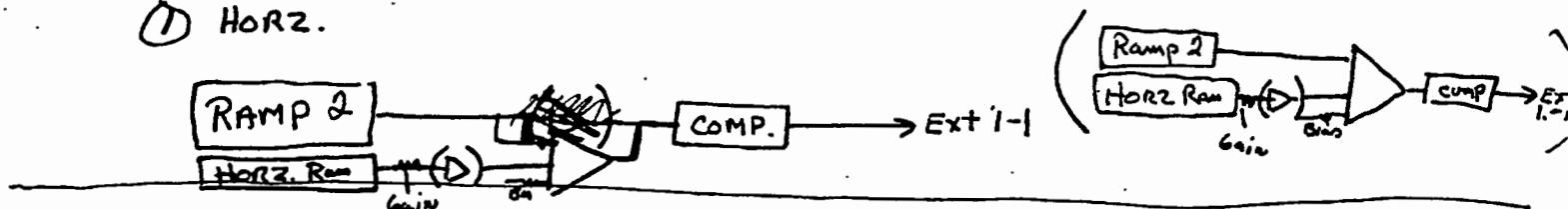
DIVIDE INTO 3 section

with Horiz + Vert Blanking. blank off unwanted
raster

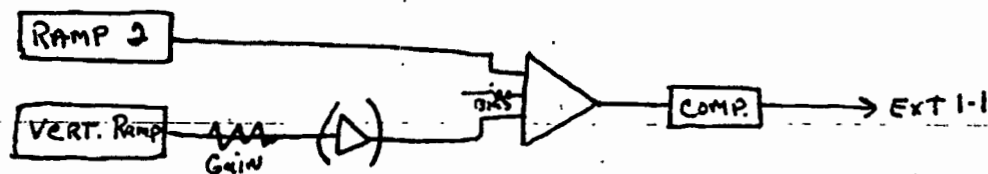


Wipes with Blanking.

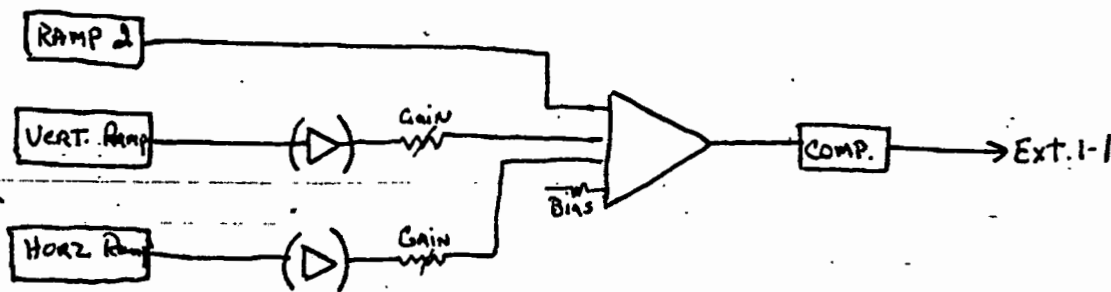
① HORZ.



② VERT.



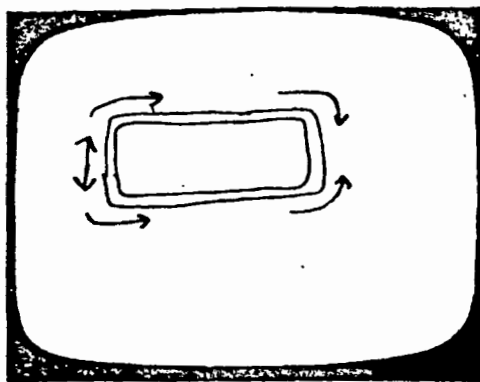
③ DIAGONAL



Notes For HORZ. + VERT Wipes

INVERT VERT or HORZ Ramp.
for opposite Wipe Direction

INVERT Sum Amp out
or Comparator (thru Digital INVERT)
for opposite Blanking.



Blowing Wipes (Special) (2 ways)

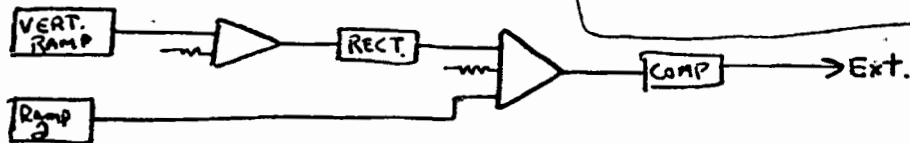
Blanks on wipes
on vertical both ways (R-2)

then Horz (R-3)

then down vertically both ways (R-4)

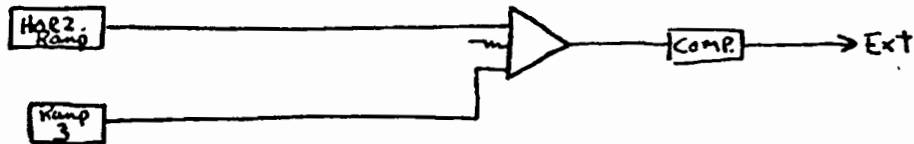
(CAN Be used with special sparkle move)
see 1 sparkle into 2
Special Animation

A

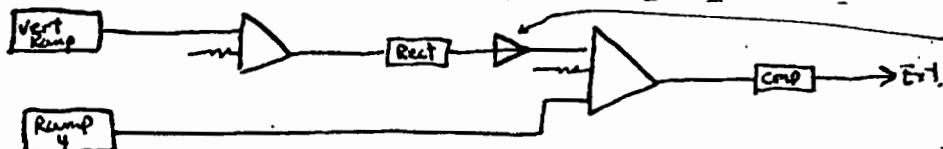


Note: 1st Sum Amp @ bias
control offset

2nd Sum Amp @ bias
controls zero point

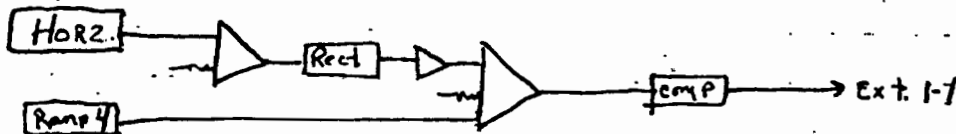
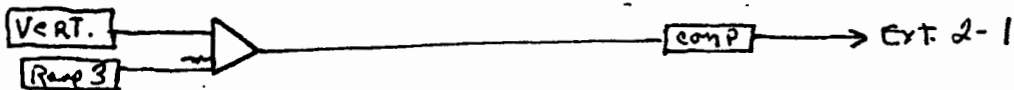
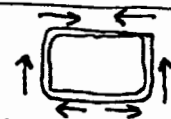
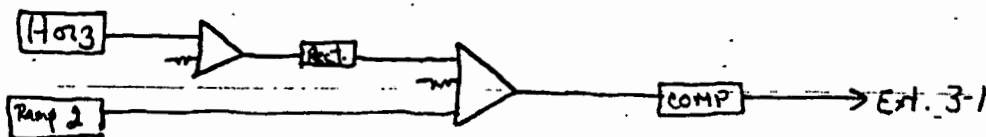


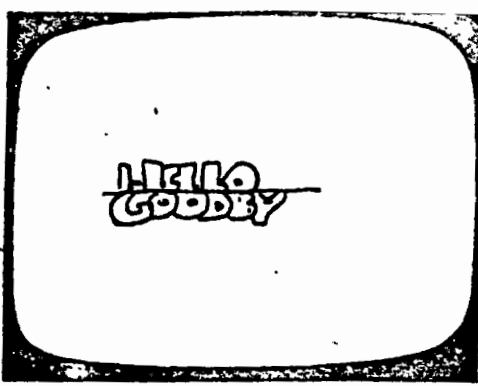
Also make artwork
small in Raster
(e. Do Not Fill Screen)
with it



Needs to be inverted
somewhere along line

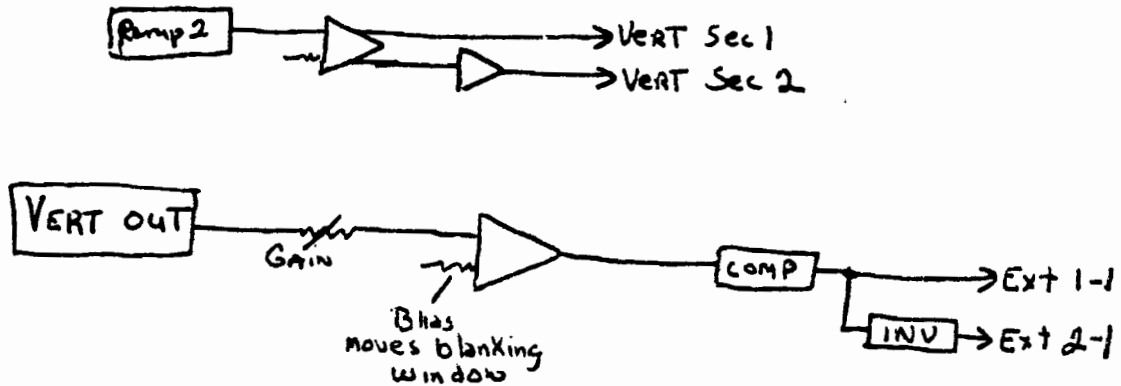
B

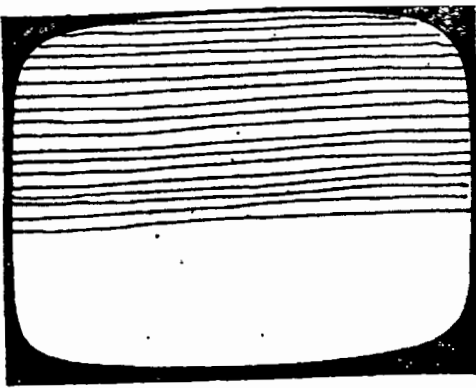




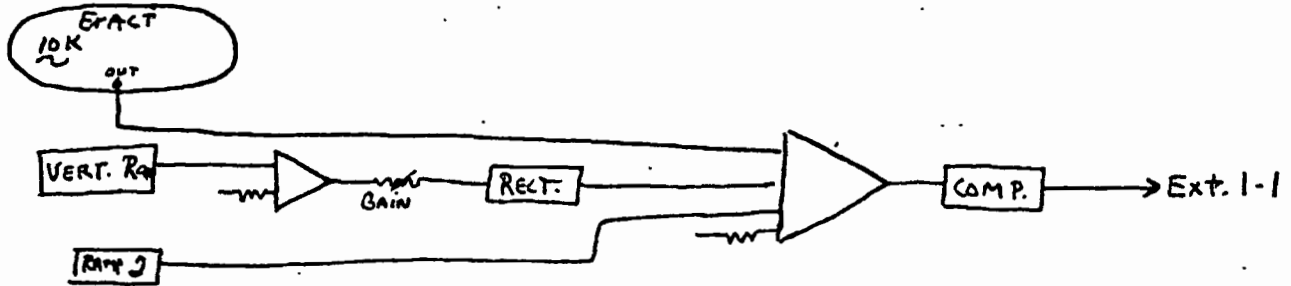
Blanking Window
words Blank out from same line

2 sections

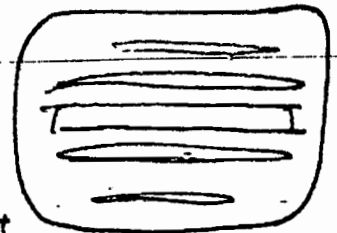
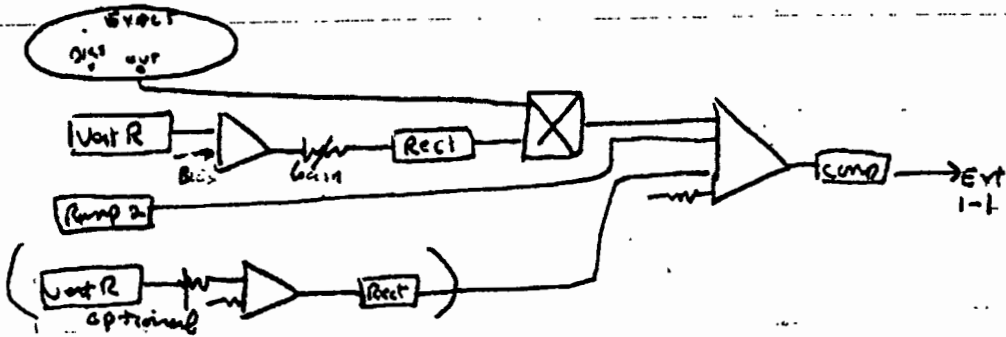




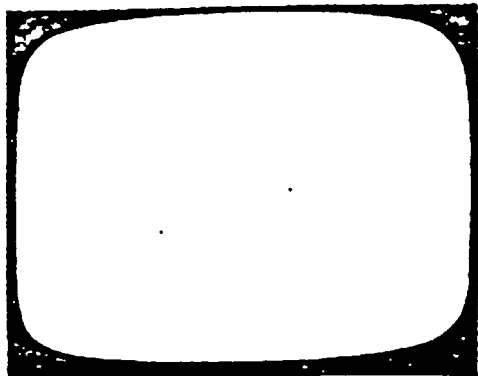
LINES Wipe ON
(BLANKING)
or For Switch Wipes (Scannimate used as
ext key source)



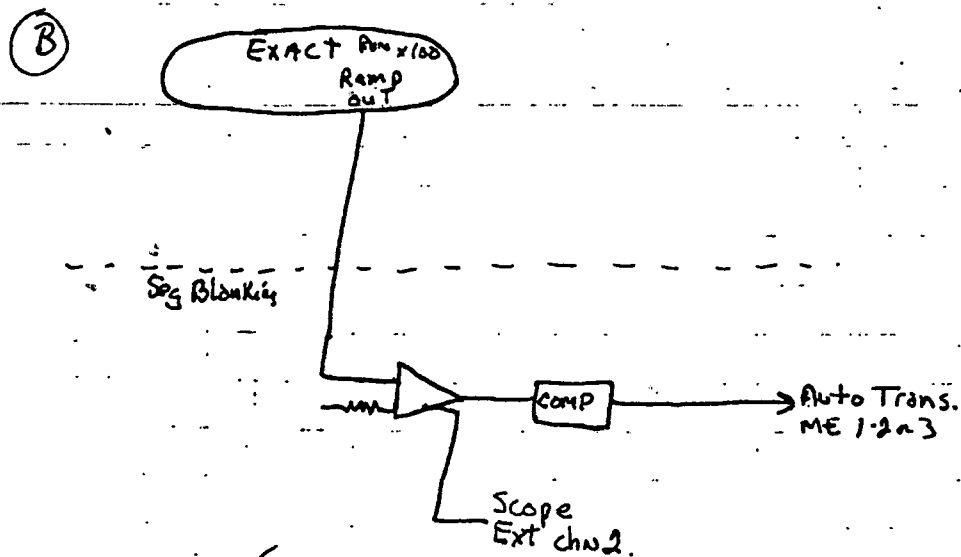
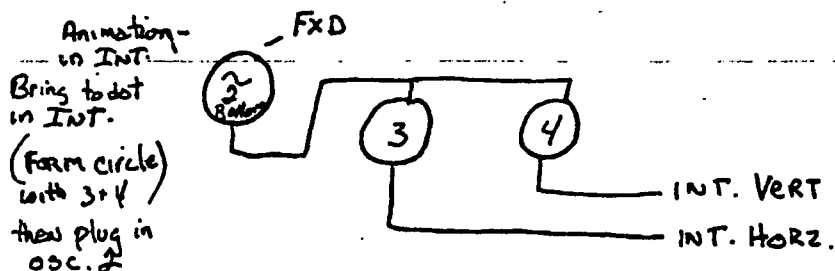
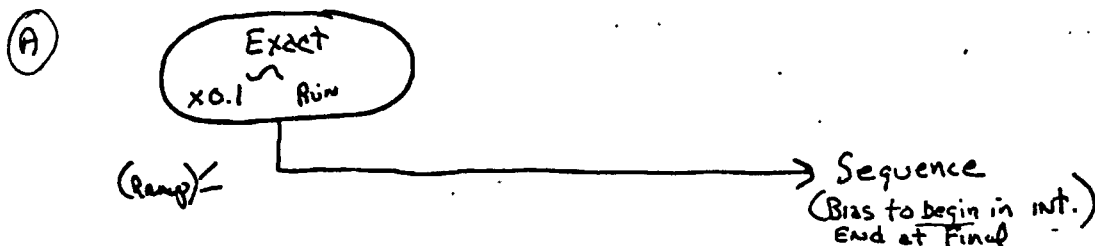
or



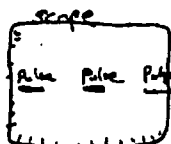
start wipe from center
out



- (A) Using Exact as a Ramp
to Repeat Int-Final to Int to Final.....
(or Animate-Resolve-Animate-Resolve-Animate-.....)
- OR (B) Exact to trigger Auto Transition
Repeatedly

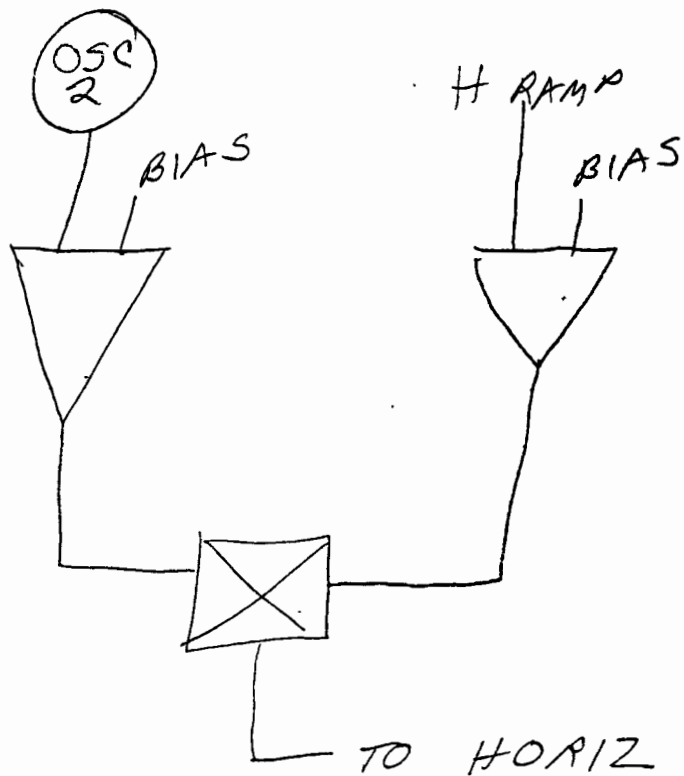


Con scope set pulses
so they are small and fairly slow

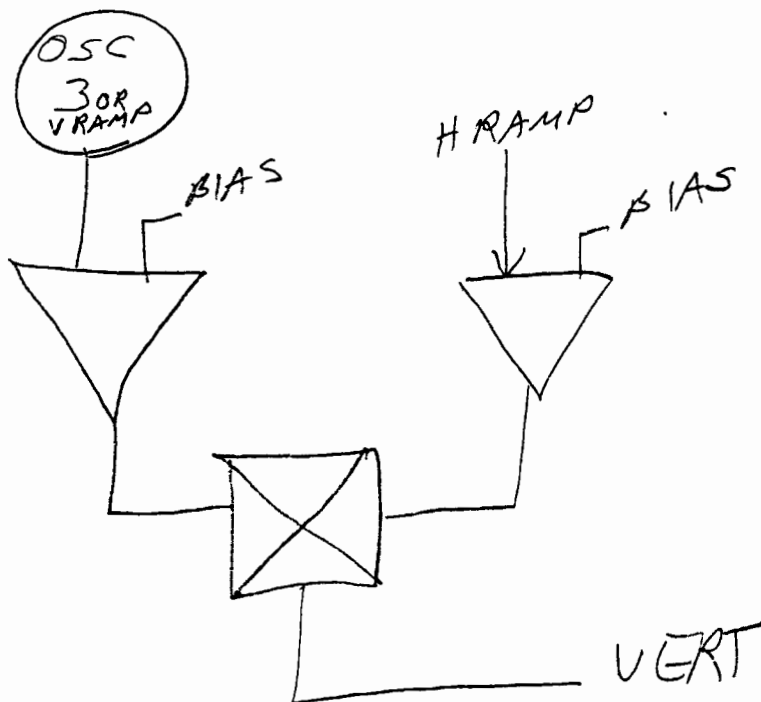


PORCUPINE EFFECT

R/W



WIDTH + LENGTH AT
ZERO

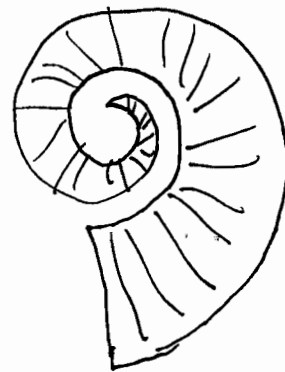
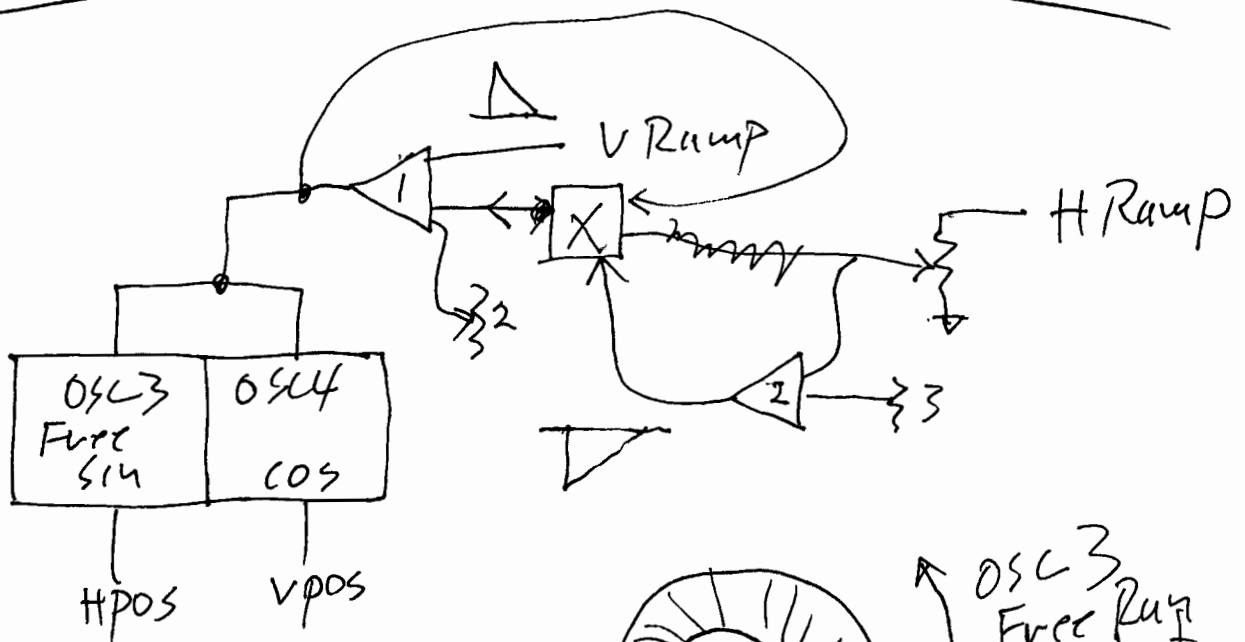


Got Milk?

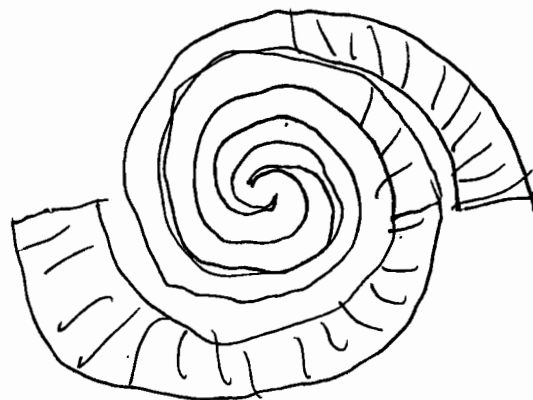
BD 4/6/9

3 → Length, HAXIS
unlocked

VR → width

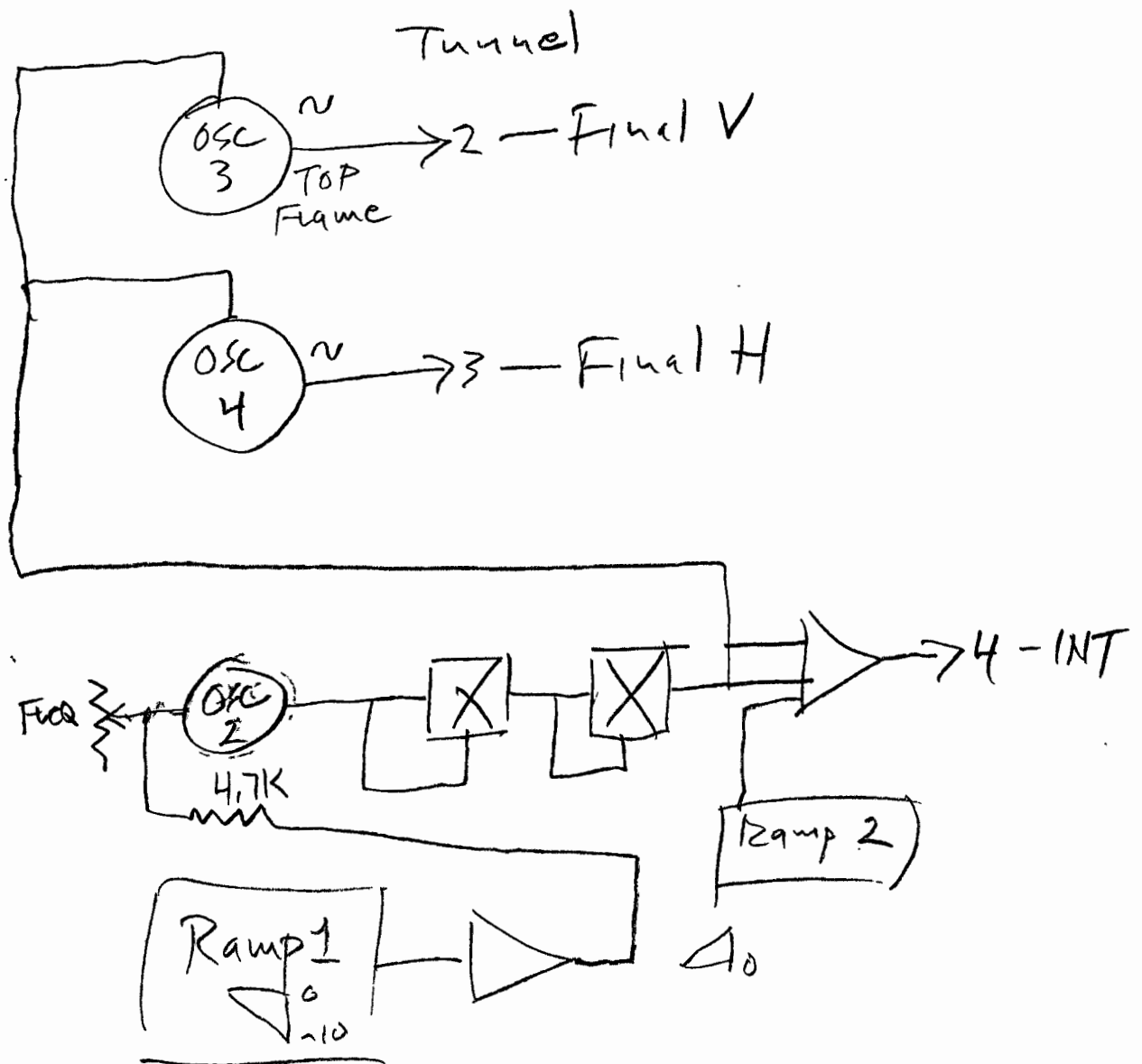


OSC3
Free Run
speed of
Rotation
~60Hz
shutter = 1/60



~120Hz
shutter = 1/25

"Community" 3-23-2014



Set Depth to zero (near)

Ramp 1 moves in/out, controls frequency of osc 2

Ramp 2 clips away to make zoom ~~never~~ never seable

Fed with Accom of "Kaleida"

spoke w/ David Turner got permission 3/23 DUS